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Dissertations
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I.

(Dissertation
on
Uterine Hemorrhage after delivery.

By
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of New Haven,
Candidate for the Degree of Doctor in Medicine.

In the year 1776, the late eminent
Dr. Osby, published an essay upon that form
of hemorrhage which precedes the birth of
the full-grown fetus; in which he divi-
ded uterine hemorrhage into two classes,
unavoidable and accidental.

Unavoidable hemorrhage is that soon, which
occurs when the placenta is attached so
near to the os uteri, as to be detached
wholly or in part, by the natural dis-
tention of the uterus, during the lat-
ter months of gestation, or the early
stages of labour; this forming an
unavoidable hemorrhage, from the open
mouth of the ruptured vessel.

This form of hemorrhage, though of much
interest, and great practical impor-
tance, it is not my intention now
to describe, but, up to the second
division.

Accidental hemorrhage is caused,
by the placenta being attached in its

natural situation, upon the body, or fundus of the uterus, becoming detached, by any accidental cause

This clasp is also divided into two; that occurring before, and that after the delivery.

The former of these divisions will also be passed over, as not belonging to this paper, but only serving as an introduction to the next clasp

Uterine hemorrhage after delivery. This form of hemorrhage is a most frequent attendant upon the puerperal state, frequently threatening the life of the patient.

Profuse bleeding after the birth of the child and before the expulsion of the placenta, is due chiefly to the separation of the placenta to a greater or less extent from the uterine surface, the uterus not contracting so as to close the mouths of the bleeding vessels; this state may arise from the following causes

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elongation of the uterus; irregular contractions;
mortal adhesion of the placental mass;
or the fetal membranes to the uterus; or
disrupted Placenta

elongation of the uterus, usually occurs in
those women who have borne many
children, where the uterus has been act-
ing feebly during the previous stages of
labour; in lingering cases; where the patient
has been delivered with instruments in which
the powers of life are depressed, and the
energy of the uterus worn out; it may also
occur from the too forcible abstraction of
the child from the uterus leaving leaving
that organ in torpid relaxed and flabby state

In treatment, the first indication is the re-
moval of the placenta from the uterus, so
as to allow the permanent contractions to
take place as soon as possible, and for this
purpose

external pressure by the hand of the phy-
sician, grasping the tumor firmly and at

the same time giving a sort of squeezing motion, will frequently induce the contraction of the uterus, and expulsion of the placenta.

Friction over the abdominal tumor is a valuable adjuvant to other remediate means. Cold also may be applied, by means of cloths wrung out in vinegar and water and ~~applied~~ spread over the abdomen and labia.

The injection of water into the umbilical veins, has been recommended and is no doubt a valuable remedy.

These means failing or the flooding becoming profuse, the introduction of the hand into the uterus and removal of the placenta should be attempted.

The hand and arm to be used, and this should be the left generally, is to be bared and lubricated. Then the middle, ring, fingers and thumb being gathered up into the form of a cone, are to be gently insinuated into the vagina and carried carefully forward until the hand is within the cavity of the uterus;

then using the fingers as a guide the position of the placenta is to be ascertained and the fingers carried between the mass and the uterus until it is entirely separate and within the grasp.

The hand should not be withdrawn until allowed to remain until nature expels it with its contents, which it will do from the irritation of the hand lying in contact with the lining membrane. the contraction may be hastened if tardy, by irritating the membrane with the end of the finger.

Irregular contraction is the second cause of this form of hemorrhage.

This occurs from the uterus having acted violently expelling the child by one or two pains, and under the same irregular action has contracted around the placenta; when improper efforts have been made to remove the placenta by pulling or working at the funis.

Either all the fibers contract together or some are contracted while others are dilated instead of

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contracting regularly from the fundus downward

The symptoms are two or three pains following each other in rapid succession soon after birth; the uterus acting strongly while the placenta does not descend within reach of the finger; the uterus feeling large and hard when examined externally

If the flooding be inconsiderable the manual operation should not be resorted to immediately, but delayed until milder means have been tried

The length of time employed in other treatment is differently stated by different writers; but the standard authors of the present day limit the time one to two hours after delivery. External means are of little avail in this form of retention

Opium in small doses is the most efficient article for procuring the relaxation of the irregularly contracting fibres, it should not be used in large doses lest it should prevent the perma-

vent contractions so essential to the ultimate safety of the patient

If adhesions coexist the hand must be introduced

Blood-letting has been recommended by some, but Krausotham thinks it admissible only when convulsions or apoplexy supervenes after the birth of the child. Ergot of Rye has been used by some but deprecated by others together with all those substances which give tone to the uterus.

Irregular contraction is of various kinds, sometimes spirular around the placenta; sometimes longitudinal; at others angular; and sometimes the central fibres contract, forming the hour-glass contraction

Treatment, if there be no flooding ~~caudamum~~ may be administered in small doses at short intervals, but if dangerous hemorrhage comes on the manual operation must be resorted to.

The hand and arm being lubricated and the fingers gathered up into the form of a cone are to be passed to one or other which is to be dilated by a slow boring motion, until the hand is fully within the cavity.

The placenta is then to be detached and the whole mass examined to ascertain that no part remains adherent; when the whole mass is fully within the hand it may be allowed to be expelled with its contents.

If the uterus takes on such violent action as to offer an insuperable barrier to the introduction of the hand, the patient should be placed under the influence of opium and the attempt renewed as soon as the uterus again begins to act, as the longer after this it is deferred, the greater difficulty will be experienced from the permanent contractions.

Another form of irregular contraction is the too rapid closure of the os uteri during the passage of the placenta detaining it partly in utero and partly in vagina.

A careful and easy dilatation is all that is necessary for its release.

Retention from morbid adhesion of the placenta to the uterine surface, is caused by a deposition of coagulable lymph between the placenta and uterus, probably a consequence of inflammation of the lining membrane of the uterus occurring during pregnancy.

The adhesion may vary in extent and degree of intensity, in extent from the size of a seipence to a uniform adhesion through-out its whole extent, in degree from that which is so slight as to be easily overcome to one so strong and intimate as that no line of demarkation can be observed even upon dissection.

Symptoms, if after the birth of the child, the placenta does not descend into the vagina although the uterus remains tolerably active; if upon pulling the sinus slightly upon the stretch and suddenly letting go it goes back with a jerk we may suspect morbid adhesion, but it is impossible to decide with certainty except by passing the hand into the uterus.

Treatment, is the manual removal of the placenta, and the only mooted question the manner of effecting the separation.

Some advise the fingers to be passed behind the mass as before described, and others that the fingers be expanded over the whole mass, and the edges squared toward the centre.

Those who advocate the latter method object to the former, lest the uterine membrane should be wounded by

the ends of the fingers or the finger nails. Those who advise the former object to the latter, lest some portion of the placenta should be left adherent to the uterus.

Opium has been recommended to allay the excessive irritability which is associated with uterine hemorrhage to procure if not a cure an alleviation of the symptoms. Absolute rest should be enjoined upon the patient and a horizontal position.

Some women seem to have a predisposition to morbid adhesion so much so as to suffer from this cause in almost every pregnancy; it becomes then important in some way to obviate this tendency, for this purpose quietude, rest, attention to the bowels and the occasional abstraction of blood seem to offer the best chance of success.

of morbid adhesion sometimes takes place between the membranes and the decidua or uterine surface in the vicinity of the placenta producing retention.

This adhesion should be treated the same as that of the placenta, and its separation is generally easy of accomplishment.

Disrupted placenta. - When any portion of the placenta is left in utero the patient will be harassed with violent after-pains, preventing sleep, and causing excessive irritation; the pains become more and more frequent and at last almost incessant.

On the cessation of the first violent fit of flooding the discharge is moderate, with the occasional expulsion of coagula.

In the course of two or three days, the discharge becomes far from natural; it assumes a sanious character, of a dark brown color, and putrescent, and with it are discharged shreds of placenta.

This train of symptoms is followed by constitutional ^{symptoms} of a febrile character, ushered in by rigors; the pulse becomes rapid and generally small, with heat and dryness of skin; immoderate thirst; occasional vomiting; the tongue is white and loaded, or red, dry, and shining; erratic pains shooting from hip to hip, or in the region of the diaphragm impeding respiration; the bowels are torpid at first, but after a time become relaxed, so that it is difficult to control the discharges. In this stage unless the putrid mass is thrown off, the dangerous

symptoms progressively increase; the strength hourly diminishes; the abdomen swells; low delirium supervenes; the tongue assumes a typhoid appearance; the extremities become cold; the feces and urine are voided involuntarily; subcutis tendinum comes on, and the patient sinks in ten or twelve days after delivery.

Sometimes the putrid mass is thrown off, giving almost instantaneous relief to all the symptoms; at others they do not assume such violence of form, but instead a purulent discharge almost devoid of smell flows from the vagina and with it small fillicents of the placenta.

This discharge generally occurs on the third or fourth day after delivery and is a very favorable symptom, death seldom following its formation.

Sometimes the remaining portion of the placenta forms a nucleus for hydatidinous deposits; and sometimes it becomes organised still retaining its connection with the uterus.

Treatment, the hemorrhage is to be treated the same as the other forms of hemorrhage after its ception the treatment must depend upon the violence of the symptoms.

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The bowels must be regulated, evacuated if torpid, checked if relaxed; the irritability of the stomach may be allayed by effervescant draughts and sedative medicines.

Opium or some of the milder articles of the same class may be administered, but not so as to check the after-pains as this may cause the expulsion of the offending mass.

Bleeding from the arm has been used but has now nearly passed out of use.

Secures to the uterine region has been attended with favorable results. Counter irritation has been applied to the seat of the erratic pains, but more benefit results from treatment of the primary affection.

Relief is often obtained by injecting warm water into the uterus, if the os uteri is not morbidly sensitive; if so the vagina should be washed out every three or four hours; a weak solution of chloride of lime or chloride of soda is often a good substitute for the water.

When the symptoms of excitement have passed into those of depression, wine, ether, ammonia, bark, and the aromatics may be used but their efficacy for restoring the system to health is inconsiderable.

Hæmorrhage after the birth of the placenta. Even after the expulsion of the placenta, or rather after the extraction of it from the uterus in consequence of atony of that organ, the woman is liable to a continuance or return of hæmorrhage, owing to a want of contraction in the uterine fibres.

This may occur from any of the causes which produce atony of the uterus; as relaxed habits; bearing many children; lingering or instrumental labours; &c.

This form of hæmorrhage may be either external, or internal, and concealed; external when the blood flows freely from the vagina, and is discovered on the linen; concealed when its flow is checked in coagulæ, or any obstruction in the vagina or uterus.

Latent hæmorrhage is the most dangerous, the patient sometimes losing a dangerous quantity of blood, before the attendants are aware of her situation.

In some cases the uterus contracts tolerably well immediately after delivery, and after a time relaxes, contraction alternating with relaxation until the patient's vital energy is very much exhausted; therefore frequent examinations should be made the first hour after par-

inversion, and the patient should not be left until the practitioner is satisfied that permanent contraction has taken place.

Occasionally coagula adhere as firmly to the uterus as the placenta under morbid adhesion, and there is the same improbability of their natural expulsion; here the manual operation is to be resorted to.

Symptoms are the loss of color in the cheeks and lips; the pulse flags; fainting supervenes, with frequent sighing; the breathing becomes laborious; the extremities cool their warmth, fluctuation, and some times vomiting supervenes.

When vomiting does come on it is a favorable symptom, showing that the nervous system does not participate in the general torpor; and the exertion of vomiting has a strong tendency to bring on uterine contraction.

The diagnosis of external, ~~from~~ internal hemorrhage is easy and simple; as, if blood is found upon the linen or on the bed it is obvious that the hemorrhage is external; but if on the contrary the woman shows symptoms which lead to the suspicion of hemorrhage while none is discovered externally; if the uterus upon external examination feels large and hard, and gives the sensation of containing a fluid;

if it becomes harder upon pressure, and blood gapes from the vagina with a gurgling noise; the case is evidently one of concealed hemorrhage.

Treatment; the first indication is to empty the uterus of its contents; if the powers of life are depressed they may be aroused by the judicious use of stimuli.

Pessure and the application of cold will often prove sufficient. Should they fail astringents may be injected into the uterus; iced water, vinegar and water; stuffing the vagina and os uteri with cloths wrung out in vinegar; the introduction of an imperfectly quartered lemon.

Astringents have been objected to by some lest the uterus or its veins should take on inflammation from their use; but the general practice of physicians in this place and vicinity is to introduce an alum plug into the uterus, and allow it to remain untill cast off by the contractions; nor do the unpleasant effects apprehended follow its use.

The introduction and inflation of a bullock's bladder, has been recommended; but this can not aid the contraction of the uterus, which it should be our object to produce.

Compression of the abdominal aorta has been much lauded by some, and may be successful where it can be applied.

The application of the child to the breast, is a very efficient means of procuring contraction of the uterus.

The mineral acids in conjunction with other remedies, act as grateful refrigerants, but are of little avail when used alone. Ergot of Rye has been used with great success, on account of its specific action upon the uterus.

As a last resort, the hand may be introduced into the uterus to provoke contractions by direct irritation of the uterine parietes.

Transfusion of blood from a healthy individual, into the circulation of the sinking patient is the last resort.

It is admissible only in those cases, where the uterus has contracted, so as to preclude the possibility of any farther hemorrhage.

Mode of Transfusing; a syringe should be provided capable of containing three or four ounces, it should be of brass lined with tin, air tight, and free from oil; one or two persons, (male rather than female from their less liability to faint) should stand ready to supply the blood; the arm of the patient should be bared, and one of the veins at the bend of the elbow dissected from its connection for a little distance, and an open-

ing about a line in length made in it; the blood is then to be drawn from one of the bystanders in a full stream into a conical vessel and absorbed as it flows, into the syringe seated to the proper degree; the syringe is then to be raised to a perpendicular and the piston slowly propelled forward, to expell any air that may be in the syringe: its point is then to be inserted into the orifice in the patients vein and the blood carefully propelled toward the heart.

The stream should be carefully suited to the diminished action of the heart and arteries, lest being too forcibly thrown in it choke the heart in its action and cause suffocation.

If on the other hand the blood is thrown in too slow, it may stagnate and thus be rendered unfit to sustain life.

The quantity should vary with ^{the} state of the patient each syringe-full being carefully watched, and its effects noticed; twelve or fourteen ounces is thought by authors generally, to be all that would be required by any case.

Timothy, Phelps, Decr 22

II.

Dissertation
on
Delirium tremens.

By
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Delirium Tremens

It would almost seem as if the disease under present consideration were especially appointed as a penalty to wait directly upon the sin of Drunkenness; for whatever may be said of its alleged production in certain rare cases by other agencies than that already adverted to, all are ready to agree, that the intemperate in the use of intoxicating & more especially spirituous liquors are its principal, — almost if not altogether, its sole victims. Whether, indeed, the disease is ever induced by other articles than alcohol is a controverted question, — Some writers confidently maintaining that genuine Delirium Tremens is witnessed only in Drunkards, while others again assert that other substances, as Opium for example, are adequate to its production; and in confirmation of such views cases are cited as occurring in persons in no wise addicted to the use of intoxicating beverages. It deserves however to be remembered in connexion with this subject, that it is not always easy to determine with absolute certainty whether persons

well reputed among their neighbors for temperate habits.
are disproportionately so reputed, since it not very infrequently
happens that individuals, more especially among the better
classes, shielded by the circumstances of their rank & station
from vulgar scrutiny, are found to have been addicted
to the immoderate use of intoxicating ^{drinks}, for a length of time
without having established in the least degree a character
for intemperance or being assailed even by the breath of sus-
picion. In this way, possibly, is to be explained some
instances of the occurrence of the disease supposed to be
entirely removed from the action of the ordinary causes which
operate in its production & more especially when we take
into account the well-known fact that the long-continued
use of alcohol in quantities short of intoxication is even
more efficient in the production of the affection than
occasional fits of intoxication with intervals of abstinence
between. — Leaving the decision of this question
however, to those more competent for the task, we pass to
the ordinary exciting causes of this disease, — a state of
the system having been induced, by various means,
favouring its access.

In a constitution predisposed to the disease, whatever

operates to make a strong & sudden impression upon the system may serve to develop the disease & the intensity with which the exciting cause will require to be applied will vary with the degree of predisposition. It may be a single violent detouch, more especially if directly succeeded by a sudden abstraction of accustomed stimulus, or other depressing cause; great losses of blood, the consequence of injuries or otherwise; excessive alvine evacuations; long continued abstinence from food; the impression made upon the system by the action of other diseases causing the to supervene upon the previously existing disease or to follow as a sequel; the shock produced to the system by fracture & other injuries: Such are among the common exciting causes which, acting singly or as may be, several of them in concert, are observed to produce the disease in persons who by long-continued excess have rendered themselves liable to its attack. The shock arising from fracture in particular, deserves to be mentioned as particularly prone to develop this disease in the class of subjects of which we speak. A knowledge of this fact should lead the Surgeon to be on his guard in such cases & ready to detect the first indications of the approaching malady, in order

if possible to prevent the further development of the disease or at least to mitigate its severity by the employment of appropriate treatment in its early stage. The disease supervening upon injuries has been called *Delirium Traumaticum* — in all probability one & the same disease, — the injury being deserving of no higher consideration as concerned in its production than as an exciting cause; inasmuch as the disease so denominated seems chiefly to have occurred in persons of intemperate habits, — & to have been characterized by essentially the same symptoms & to have been successfully treated by the same means.

The approach of the disease is announced by symptoms of general indisposition, — diminished animal temperature, in particular a cold & clammy state of the extremities, — anorexia or positive loathing of food, — vertigo, — a sense of oppression at the præcordia, — in some instances, nausea & vomiting. At the same time the appearance & manner of the patient is observed to undergo a marked change; his countenance is anxious & dejected; his spirits are much depressed; he is troubled about his affairs, sighs frequently & is distressed with forebodings of evil. A disinclination to sleep

is early manifested & even before the obstinate perspiration which forms so marked a characteristic of the disease in an after stage is fully established, — Though the patient may sleep, his slumbers are transient & disturbed with harassing dreams. The pulse in the commencement of this disease, as some say, is invariably slow, as most concur in saying, soft & compressible. The tongue is moist, more or less furred, & is frequently tremulous. The intestines are commonly rather torpid, though with respect to this, no uniform state is invariably present. The skin, over the surface generally & especially upon the extremities, is cool, as already noticed. It is also moist & is bathed in a profuse sweat upon the most trivial exertion. This however is more strikingly manifest in the more advanced stages of the disease.

As the disease progresses there is an aggravation of the symptoms generally which have been mentioned & with the addition of others more decidedly indicative of its character. There is increased restlessness & watchfulness, — Commonly a disinclination to lie down & disposition to be moving continually from place to place. The pulse increases in frequency — The hands become tremulous.

The patient betrays an untidiness in all his motions, with unusual precipitancy of speech. The countenance assumes an aspect of wildness; the eyes are cast about with quick & searching glances or often fixed upon some object which engrosses the attention for a moment & then perhaps suddenly withdrawn. The mental aberration now becomes more decided. The patient is continually seeing objects which are present only to his disordered senses, & these become the burden of his incoherent conversation. All manner of frightful, disgusting, & annoying objects pass in review before him. He is haunted by demons, — very frequently a variety of them: "big devils & little devils" are on every side. Termites, in swarming myriads, are creeping over him. Beegones are sitting upon, or sharing with him even more familiarly than these, his bed. Cats & mice are burrowed in his bed clothes & he labors to dislodge them. If allowed his liberty he will frequently leap suddenly out of bed in pursuit of some phantom or fly precipitately in retreat from some hideous apparition. It is very common that the subjects of this disease convince themselves

not in their own house but confined in some dismal place & earnestly entreat the interference of their friends or the bystanders for their release. They frequently imagine themselves engaged in their accustomed occupations. The tradesman, wrapped in an air of abstraction, is busied with negotiations, receives money, settles accounts, — the mechanic goes regularly through with the ordinary manipulations of his art, — the sailor is working his ship. The hallucinations of patients are often sufficiently ludicrous, but oftener the spectacle is such as to move our profoundest pity. Brest on every side with the hideous creations of his disordered fancy from which he vainly endeavors to fly, — occupied incessantly with torturing conceits which rob him of all peace & rest, the miserable sufferer labors under a state of the most intense mental excitement & often presents a picture of utter agony. In his struggles with his imaginary enemies a profuse sweat is poured forth which stands often in thick drops upon his forehead & is continuous in a greater or less degree throughout the course of the disease. From the moment delirium is fairly established, there exists the most obstinate

watchfulness. Sleep seems to have forsaken his eyes. Occupied continually with his mental illusions, no sooner has one vagary passed away & ceased to de- spoil him of all mental quiet such as should induce sleep, than another succeeds, to vex his soul anew & thus he is kept continually upon the rack. During all the while, however, his morbid train of thought may be temporarily interrupted. To questions addressed him, his replies are often sufficiently apposite & coherent. His attention may frequently be engaged for a moment & his mind turned off from its engrossing hallucinations by the entrance of some one into his room who has not before been about him, but it is only for a moment & he relapses again into his former state.

In cases which proceed to a fatal termination, the same state of mental & physical perturbation continues till nature can endure it no longer. If haply before this, by the timely interposition of appropriate remedial measures or the sanative efforts of nature, sleep be procured — a sound & tranquil sleep lasting several hours — the patient usually awakes refreshed, — the specter which haunted him has fled & he is recovered.

In case when the issue is less fortunate however, the symptoms gradually augment in severity. The delirium by degrees assumes complete control of the patient, so that he no longer knows what is passing about him. Wholly absorbed with his mental illusions he mutters incessantly to himself, or as may be, now & then utters loudly & impetuously something prompted by an unreal scene which is before his mind's eye & in which he supposes himself to be an actor; the tremors of the hands increase attended with agitation of the entire frame; the muscles of the face are incessantly twitching producing frightful contortions; the countenance is deadly pale & wears an expression of exquisite distress; the pulse becomes more & more frequent & indistinct so as scarcely to admit of being counted; sudden & rapid collapse of the vital powers takes place; the extremities become icy-cold,—the breathing stertorous & convulsive close the miserable scene. In some cases it is said shortly previous to death a delusory calm takes place which is the speedy precursor of the fatal issue, but it is believed a state of profound insensibility with or without convulsions, as noticed above, is the one.

more frequently observed as the immediate antecedent of a fatal termination.

Without entering minutely into the diagnostic symptoms by which this disease is to be distinguished from such as more nearly simulate it, it may be generally observed, that the peculiar character of the delirium already sufficiently adverted to, with the frequent but soft pulse accompanying it, — the tremors of the hands & tongue with the unsteadiness of all the voluntary motions, — the profuse perspirations incident upon slight exertions, — the obstinate & ordinarily unremitting watchfulness which obtains, will ordinarily be found sufficiently pathognomonic of its character. Indeed no one who has ever seen a strongly marked case of this disease will be likely ever to forget it or to fail of recognising it when he sees it again.

With regard to the prognosis which is to be formed, it may be sufficient to observe that when the powers of the system are not greatly broken down & the disease is not associated with other constitutional maladies or severe local lesions, the prognosis in a first, second or even third attack is ordinarily favorable.

When however the disease has recurred repeatedly; when the Constitutional vigor has been greatly impaired by long-continued excesses, then having induced great disorder of the gastric, hepatic & other subordinate parts of the digestion system; when this supervenes upon other diseases, or is complicated with some local injuries; then all are modifying circumstances which are likely to influence materially the result & may afford us reason to apprehend a fatal termination. The occurrence of this disease in patients laboring under fractures or other severe injuries always constitutes an exceedingly unfortunate complication, inasmuch as it becomes necessary in such instances to impose restraints upon the patient, — a circumstance always greatly to be deprecated. It has already been mentioned as a characteristic symptom of this singular malady that the patient is continually wanting to get out of bed — to be changing from place to place. He is always impatient too of the least restraint & inassailable if opposed in his wishes. Hence the necessity which arises in these cases of confining the patient to a fixed position is always to be regarded as an extremely

unfortunate one, since the mental irritation which it will surely produce together with the exhausting bodily struggles which the patient no less surely will make to liberate himself from confinement can not prove otherwise than highly disastrous in their effects.

The pathology of the disease is a subject respecting which there has been a considerable diversity of opinion. Some writers have chosen to consider it as strictly a nervous malady; others have regarded it as a febrile disease; some would refer its seat to the stomach, others to the brain or its membranes, while others again (probably with greater propriety) consider it as a functional disease & not necessarily connected with structural lesion in any part.

We do not propose to ourselves the task of canvassing the merits of the one or the other of these opinions, but shall not content with the simple statement of the different views which have been entertained upon the subject.

As might be expected from the differences of opinion which have been noticed respecting the pathological character of this disease, some diversity of opinion has existed in relation to its appropriate treatment

Under the idea, probably, that the disease is connected with inflammation of the brain or its membranes the use of the lancet has been recommended. It is however at the present time more generally discarded as altogether an inappropriate remedy in the ordinary & uncomplicated forms of the disease. Those indeed who have advised its use have commonly felt it necessary to accompany the recommendation with pious cautions in respect of the amount of blood safe to be abstracted, — the impracticability ordinarily of repeating the operation, & the hazard even of venturing upon it at all without the greatest circumspection in respect of the case in which it is to be trusted to. It is a well recognized fact that the class of subjects liable to this disease in general ill bear sanguineous depletions even in those diseases where the usual symptoms afford much less equivocal indications for the use of the lancet than those which are present here.

A mode of treatment which has received more favor though still adopted to a very limited extent — is by Emetics. Much success is claimed in the treatment of this disease by Tartar Emetic given to

The extent of producing free vomiting & repeated, once, twice or more as is judged necessary. A large proportion of cases will doubtless recover under this as under almost any mode of treatment, yet it may well be doubted whether it is well adapted to the worst forms of the disease or is the most reliable means of cure as it is ordinarily met with.

By far the more common mode of treatment is that in which principal reliance is had upon narcotics. The great indication is considered to be, to procure sleep, — not that sleep by whatever means induced will invariably effect a cure, but that it is essential to recovery. No other way of escape is open to the miserable sufferer from the tormenting phantasies with which he is possessed: The Spectres which haunt him will not away till sleep comes to his relief & shuts them out from his vision — nor always then. To fulfill this indication of course has been had to Opium, which has been recommended by most who have written upon the disease as the main remedy in its treatment. Its power over the disease is set forth by some in very strong terms. We find

language like the following held concerning its efficacy. By one, — "It is entirely & absolutely under the control of Opium". Another says — "Opium in large quantities never failed to cure simple *Sclerum Tenuis*, at whatever period of the disease it was administered" Another, — "All that is required to make a safe, a quick & pleasant cure is to give Opium in sufficient quantities. Such however is the language of extravagance. Opium is undoubtedly a remedy of great value in this disease. It is impossible to resist the mass of testimony in its favor. It is the remedy which has been & probably is still more trusted to than any other in the treatment of this disease, yet it is not to be considered as affording by any means an infallible means of cure or as deserving of exclusive consideration among the list of remedial agents. If trusted to, it should be given in free & repeated doses till a disposition to sleep is witnessed or the ultimate effects of the article begin to be manifested. It is impossible to prescribe any definite rules with respect to the quantity proper to be administered as this must necessarily vary

much under different circumstances. In a case of much severity it might be proper to commence with from 2 to 5 grs of Opium & after the lapse of two or three hours if no effects are observed, continue its administration in dose of a grain or more repeated every hour.

Another remedy belonging to the same class & which seems deserving of very high consideration in the treatment of this disease — is Digitalis.

Though more recently applied to the treatment of this affection, — less extensively used & possessing less evidence in its favor than Opium, ample testimony is not wanting to the decided efficacy of this article as a remedial agent in the disease under consideration. Some practitioners have found its use attended with so great success as to be led to rely solely upon it in the greaterity of cases. To ensure its remedial effects however in their full measure it requires to be administered with much greater freedom than would seem admissible if guided by the directions which are ordinarily met with for the administration of this article. It would seem prob-

able indeed that the activity of this medicine has been greatly overrated & that in disease generally in which its use is indicated, it may often safely & advantageously be prescribed in much larger quantities than those commonly directed. It may be exhibited in this disease in doses of a fluid dram of the Tinct. every hour, several times repeated — or as some prefer in full doses of a half ounce repeated once or twice at intervals of two or three hours & then suspended. Such is the plan usually adopted by Prof. Hooker of the Inst. as stated in his Publish'd Essay on the Prop. & Circ. Functions. Forbearing any direct attempts to procure sleep during the day, it is his habit to direct at evening an ounce of the Tinct., of which one third is to be taken every two hours till the desired effects are produced or the whole is taken. If this should fail which he has seldom found the case an ounce & a half is directed the following evening to be given in the same manner.

In some few cases, however the attempt to induce sleep with *Sigitalis* has failed altogether, in which

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The exhibition of a small amount of Opium subsequently entered upon has been attended with success. Without doubt the converse of this would be observed to happen in numerous instances. An exclusive reliance, therefore upon either article in all cases, is not to be advocated & perhaps the conjoined exhibition of the two is the plan which would promise most success in the larger share.

It is common that a variety of subsidiary remedies are mentioned in treating of this disease as certain of the Antispasmodics, Aconitida, Castor, Mustk, Ether — Camphor, Ammonia — Irritants to some portion of the surface, Rubefacients, Epispasticae. The warm bath, & cold affusion have both been recommended.

In individual cases where there is much torpor of the alimentary canal or of the system generally, it may be proper to premise an emetic or cathartic before entering upon the more direct curative means which have been mentioned.

It is a question of moment in the treatment of the disease whether in the case of patients who

have been long addicted to the use of spirituous drinks, the accustomed stimulus shall be entirely withdrawn. It is well known that the disease is frequently induced in old & inveterate tipplers by the sudden withdrawal of their usual beverage & then are those who (taking hint from this, it may be) treat the disease mainly by the free exhibition of alcoholic liquors & boast of their success. Others prefer to dispense with them entirely in all cases.

In the decision of this question, however, we should have reference to the state of the pulse — the constitution of the patient & his previous course of life. If the pulse be very frequent & full & the constitutional vigor has been greatly impaired by long continued excess as in old & broken down drunkards, the entire abstraction of the accustomed stimulus to which the system has become habituated, as it were, from long usage would seem to be a measure of very doubtful propriety, — however revolting ^{in itself} may be the idea of administering the very agent which is responsible for the mischief which we are called upon to remedy.

It has already been indirectly stated that coercive measures should be abstained from as far as possible in the management of patients. All unnecessary opposition of their wishes with what even has a tendency to exasperate or in any way irritate, should be sedulously avoided. A mild & conciliatory manner should be had with them & the tendency to sleep promoted by every means in our power. The first slumbers of the patient are often interrupted by sudden startings, but in general if the treatment has been efficient, he speedily relapses again into a profound sleep which puts an end to the disease. If the patient awakes (as happens in some rare instances) with no mitigation of symptoms & immediately recurs to his former morbid train of associations, it is an occurrence of ill omen with respect to the event of the case.

In general, however, if we can succeed in inducing a sound & tranquil sleep it is followed by a speedy restoration. And here we can not forbear to advert to the period of recovery

as one which the physician should seize upon, in the
hope, though it be a faint one of making a salutary
impression upon his patient. The spell which surrounds
him with Legions of Demons, — which filled his pres-
ence with all manner of horrible Things to affright
& torment him is broken: he is himself again.
Yet these fearful creations of his disordered fancy are
still fresh in his memory. The fierce tortures through
which he has passed are still present to his recollection
with painful distinctness. At such a time, reason
will assert, tho' it be for a little moment, her supremacy
& point him to the guilty cause of all this evil & the dire
consequences which inevitably await further persistence in
his criminal indulgence. Every circumstance points to
the present as a favorable crisis, in which if ever the hope
may be entertained by faithful representations & well-di-
rected efforts to induce the patient to abandon his
Cups, — an opportunity which however unpromising
in general the attempt may be should not be suffer-
ed to pass without an effort to accomplish so
important an object as the reformation of a
drunkard.

S. M. B. D.



III.

Dissertation
on
Groups,

By
Edwin Bidwell,
of Manchester,
Candidate for the Degree of Doctor in Medicine.



Laryngitis or Croup

Cullen says in his practice of Medicine that Croup was supposed by some to be a new disease, but that such was not the fact. Says that the disease had been described by many both of the ancients & modern writers, but that little was known respecting its true nature until it was investigated by Dr. Home. & made known in a small pamphlet at Edinburgh 1763. - & thus we might infer from the fact that about this time, the disease was supposed to be confined chiefly to adults.

It would appear that Dr. Home came to nearly the same conclusion respecting its Pathology as is maintained by Pathologists at the present day.

Pathology - The true Pathology of Croup appears to be an inflammation of the Mucous Membrane lining the trachea, & extending into the larger bronchial tubes, also to the Larynx & fauces.



which results in the exudation of a secretion differ-
ing much from the ordinary healthy secretion
of the part—being a tough viscid mucous mucus-
purulent or coagulable lymph, which concretes
into a membrane more or less perfect.

At the present time some of our most respect-
able Physicians recognize Croup or what ap-
pears to be Croup, & believe that the same
as appearing under three forms or species
1st Croup Gracile, & it is all the same
formation of a false membrane.

2nd Inflammation but not terminating in
the formation of a false membrane.

3rd Spasmodic Croup, which is usually found
in a Spasmodic affection unattended with inflam-
mation.— Dr. Swett of New-York Physician at
the City Hospital is of this opinion. He says
Genuine Croup is a specific disease always attended
with the formation of a false membrane, not de-
pending on the severity of the inflammation—
It is also the opinion of some that in most
cases of Genuine Croup, that the false membrane



may be seen in the fauces, ~~or~~ on some part of the
membrane lining the fauces, & not unfrequently pre-
vious to the time that the dis- is developed in
the trachea. Thus Prof Ware of Boston states that
in 33 cases of Genuine Croup which came under
his treatment that in 32 cases a false membrane
was discovered in the fauces & that 30 of these
patients died. Also states that in 104 cases where
no false membrane could be discovered that
all recovered. Thus it would appear that the
fatality of the disease depends much on the
formation or nonformation of a membrane in
the trachea. Dr. Swell remarked that so far
as his limited experience went it would tend
to substantiate the above (PC) respecting the for-
mation of a false membrane in the fauces, &
that in many if not in most cases primary
ly forming here & extending downwards into the
trachea. Related a case where he was called in
on consultation. Child very sick with the ordinary
symptoms of Croup, but no false membrane could
be discovered. At his next visit a child dying

The same family was complaining - was about the house and to all appearance a common cold - but on looking into the fauces a false membrane was plainly to be seen. The child soon succumbed with Croup & died. The child lived & then recovered.

Symptoms

In Benign Croup the symptoms usually come on gradually - Child appears to have common Catarrh. It is said that hoarseness frequently precedes in respect to which Dr. Cheyne makes the following remark "It is very rare, he says, to see not usually attend Catarrh in very young children & when noticed should put the Parents & Practitioner on their guard". The child becomes fussy, fretful, & does not rest well. In the course of from one to three or four days the characteristic symptoms of this disease appear, dyspnea, Druffy Cough, which has been compared to that produced by coughing through a handkerchief. This cough is in expiration & followed by loud prolonged & growing inspiration. Some of the inflammatory type in the usual case is attended by



flushed face - eyes prominent, injected & heavy -
pupils frequent, quick & tense - skin hot & dry -
Cough usually dry, with little or no expectoration

Most of the Phenomena present in croup
are readily accounted for. The presence of a
membrane forming a mechanical obstruction to
the ingress & egress of air to the lungs - together
with the spasmodic closure of the Glottis which
is frequently present, Causes the little sufferer to
struggle hard for breath: the head is thrown back
that the entrance of the respiratory membrane may be
kept open. In consequence of the occlusion of
the air from the lungs, the blood is partially oxy-
genated, & in this condition is sent to all parts
of the body - To the Head exerting its injurious
effects upon the Brain, greatly impairing & distur-
bing the functions of the Nervous System, & con-
sequently the whole system soon suffers. This together
with the dyspnea soon exhausts the Patient
The pulse which at first was full & strong, becomes
feeble & irregular - Cough full & husky & the
voice sinks into a whisper. The effects of the



blood loaded with carbon are made visible in the cavity of the left & right - in the latter line of the surface is in general to be the surface which is often in the consequences of the blood thus circulating un-oxygenated, there is a strong tendency to stagnation in the capillary systems, & unless the Patient feels relief soon dies, usually in a comatose state.

In the second variety of Croup the symptoms are similar to those of the first.

Chenier says that the formation of a false membrane does not take place even in the majority of cases & this is the testimony of others. Some have supposed that there is sometimes cases unattended with the formation of a false membrane, to one attended with a membranous

3rd Species. Spasmodic or Spasmodic Croup. In this its attack usually suddenly often during the night after exposures. The immediate cause of this affection, is supposed to be an obstruction in the passage of air through the Glottis, by a spasmodic contraction of the constrictor.



of the larynx, which may be induced by irritation
irritation caused by leeching, by undigestible food
in the stomach intestinal irritation &c.

The false membrane formed in Croup differs essentially from that formed on membranes during closed canals: the latter becoming organized to a vascular connection taking place between it & the membrane on which it is effused, while in Croup no such organization of vascular connection takes place. The membrane effused in Croup is also said to be more brittle, less fibrous, & more albuminous than that occurring on serous membranes. Why inflammation in which the symptoms are the same or similar, should result in the formation of a false membrane in one case & not in another, I believe is not yet well determined. Dr. Swett thinks the formation of this memb. does not depend upon the severity of the inflammation. Dr. Charles says that it is not improbable, that the inflammation is at the highest grade of violence in those cases attended with the formation of a false membrane.



less intense when it is only a mucous purulent secretion formed, & at its lowest grade when the secretion consists simply of a tough transparent or frothy Mucopus

Causes Among the causes supposed to favor the production or predispose to this dis. Cold combined with moisture stands most prominent. A. Watson says that cold situations & damp places, more than such as are merely cold are subject to the frequency of this dis. It is said to be most common in towns near the seashore or those situated on rivers or near any large body of water & most frequent among the children of washerwomen in those places. It has prevailed epidemically in towns about Scotland after an inundation in 17. Wilson has remarked that it seems often to be produced by children sitting or sleeping in a room lately washed. Some have supposed that in some instances the predisposition to the disease was congenital, some that children in which the neck & upper part of the chest is often



to remain bare are much more subject to this disease, than when these parts are covered.

One attack in some cases would appear to predispose to subsequent attacks: the same individuals are sometimes suffering five or six attacks during the period of Childhood, or previous to puberty.

Diagnosis True Croup may be history and from the medical symptoms, that by symptoms of invasion, which are usually slight in the latter form, and for a period of time the symptoms are not so marked as in the former. I must own rarely during the night, - before the progress of the Patient appears to be such, with little or no dyspnea, & no fever, except it be produced by an accidental occurrence, no more acceleration of the pulse than might be expected from agitation or fright. In true Croup, a total absence of the dyspnea from the nature of the case cannot take place. We may have passages of exacerbations of the Croup, symptoms of inflammation causing a spasmodic closure of the



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Glottis, many times threatening the immediate
extinction of life. In this case I usually suspect
diphtheria but this is not so. It may not always
be as easy to discriminate between the two first
mentioned but the presence or absence of a false
membrane in the fauces & especially the pres-
ence or absence of a mucous rattle at the com-
mencement of the disease, will I think in ma-
ny if not in most cases enable us to make
out our diagnosis with a considerable degree
of certainty. Enlarged Glands proceeding from
the pneumogastric or recurrent nerves may
cause paroxysms of dyspnea by spasmodically
closing the Glottis, but by the vomiting of
worms it may usually be distinguished from
Croup without difficulty.

Prognosis

This disease is always to be considered as
a serious affection & the most prompt & effec-
tive plan of treatment is to be adopted at once,
& when adopted during the forming stage the
Physician often has the satisfaction of saving the



disease yielding timely to his remedies: but when the disease has fully formed, he is often pained that his best efforts are nearly fruitless & not withstanding all the means in his power of combatting the disease are most strenuously applied he finds that they are altogether inadequate to produce the desired effects.

From the statements of Dr. Ware & others it would appear that medical aid was of but very little avail in most of these cases attended with the formation of a false membrane, & this might be inferred from the nature of the affection. It has been stated by some who have had the most experience in the disease that more than 4/5 of these cases terminate fatally, also that the great majority of these cases unattended with the formation of a false membrane terminate in recovery when the appropriate treatment had been adopted & would probably under less favorable circumstances in many cases.

From these statements it would appear that a knowledge when it can be attained of the presence



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or absence of a false Membrane would enable
us much in making out a correct Prognosis
Treatment

In order to treat this disease ^{most} we
should know the exact pathological condition
at the time our remedies are administered.

The disease has been very appropriately divided
into three stages. In each the pathological
condition is somewhat different & the treat-
ment also requires to be somewhat modified.

1st Stage When Inflammation of a mucous
Membrane is about to take place. There is
1st Increased vascularity of the part, the Mem-
brane becomes turgid & dry, the ordinary
secretion being suspended. - This is the condi-
tion of the membrane concerned in Croup
during what is called the forming stage.

There is in this stage, two indications - Equalize
the excitement, & restore the suspended secre-
tion. Any remedy that fulfill these indi-
cations will restore the membrane to its nor-
mal condition & consequently the disease is



at once checked in its progress & overcome
Antimony is a remedy of its antiphlogistic effect
its power of exciting the various secretions & of
overcoming or equalizing excitement is well ad-
apted for the case in question, & in most
cases is to be preferred to any other medicine
there is stamina enough to endure its oper-
ation. In weak & feeble or in very young Children
Opoeac, may be substituted & used as a vomit
use Antimony in the more vigorous & robust
cases should at first be moderately subse-
quent it may be continued in non-secting doses
till the desired effect is produced. At the
same time if the symptoms are severe cups
or leeches should be applied over the upper
part of the sternum & Warm Water to the
breast by sponges, thus drawing the excitement
to the surface. The Senecapuum may also
be employed. With this plan of treatment
in this stage probably nearly every case of the
disease might shortly be over, but I al-
lured to progress a violent secretion to be

place, filling to a greater or less extent the
trachea, & air passages, which state may be
called the Second Stage. In this stage
the inflammatory action becomes more general -
the pulse quick & tense - skin hot & dry, Dyspnea
much aggravated. The chief indications ap-
pear to be to moderate the febrile reaction
subdue inflammatory action & promote expec-
toration. Here the same remedies are appli-
cable as in the first stage & administered in
the same way. In addition to this if the
Patient is robust, plethoric & there is high
tonic action, the Lancet should be used
drawing Blood from the arm, according
to the age & strength of the Patient & the im-
portance of the case. The quantity drawn in
different cases must vary from 3 or 4 $\frac{1}{2}$ to
12 or 14 $\frac{1}{2}$. After the tonic action is some-
what subdued Rubefacients & Blisters may
be employed.
If this treatment is not effective in subdu-
ing the disease, Calomel may be given

It has seemed to the strongest recommendation
of Watson is, that its usefulness of
fever to have been fully borne out by the
test of experience. It may be given in one
or two ^{grains} doses every 3rd or 4th hours alternated
with a stimulant powder or Coxes Hives Syrup.
It is also many times highly officious
and especially if the skin is hot & dry.
Putting the feet into warm water occasionally
may afford some relief also - the inhalation
of steam is said to have been attended
with much benefit even in cases attended
with the formation of a false membrane.
Syrup of Marshmallows & Lobelia have been used with
much benefit in some forms of this disease.
After the inflammation is wholly subdued
the more stimulating expectorants may be
used - Hic Syrup, Squills, Senega, &c.
But, our remedies have been ineffectual
in subduing the disease & removing the
mucous secretion from the air passages
the inflammatory symptoms give way to a

stage of debility or exhaustion, induced in part
from the violent & continued Effusion, but
chiefly in many cases from the deleterious & vi-
scerating influence on the Brain & nervous sys-
tem, caused by blood being sent to them but
partially aerated.

This stage of debility may be denominated
the Third Stage. The pulse becomes full
& irregular, Cough falls & husky Extremities
cold to the surface of the body dusky dusky
Active treatment cannot be adopted in this

stage & in several cases the Patient is first
rescued, Tepid Baths may be employed & the
use of Opium has in hopes of dissolving
the effused membrane or facilitating the expe-
ction of mucus. Warm Water may be inhaled
& if threatened with immediate suffocation a
few drops of Ammonia, or Ether may be admin-
istered, inhaled or applied to the nostrils &
mouth.

In Spasmodic or Spasmodic Croup, Active and
phlogistic treatment is not usually required.

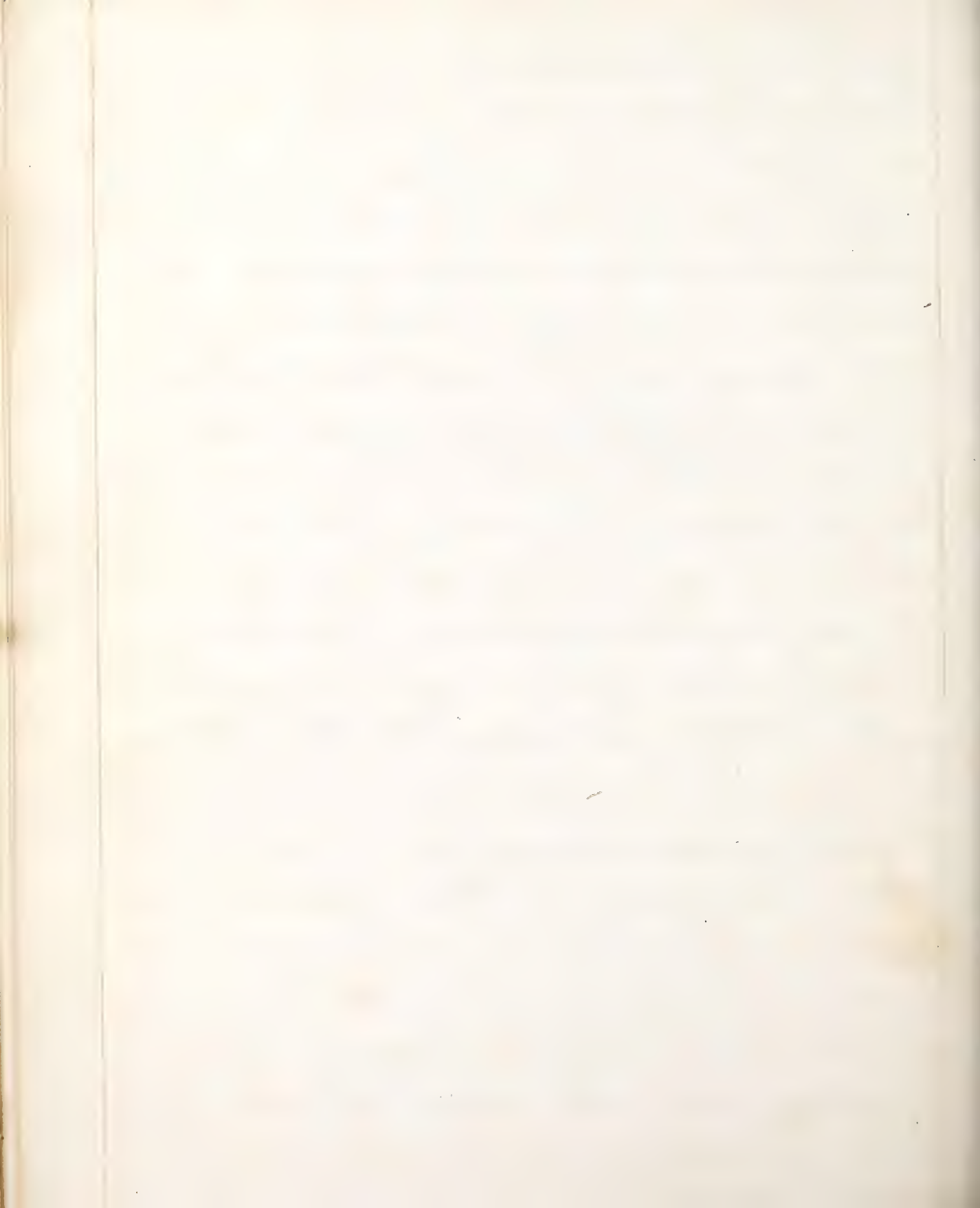
Antispasmodics or Nervines are to be employed
Carbamide of Ammonia or the Spasmodic. &c.
The Bath is the most warming and in warm water
is applied to the Trachea, Ammonia or Ether
to the Nostils & back of the neck in case
The paroxysms are sometimes very severe, placing
the Patient at once in a perilous condition
& occasionally causing death. Tracheotomy
is sometimes a justifiable operation in
these extreme cases.

Edwin Bidwell

IV.

Dissertation
on
Necrosis.

By
William Rufus Blakeman,
of Fairfield,
Candidate for the Degree of Doctor in Medicine.



Necrosis

Necrosis, ^{or} in the more common language fever sore is applied to inflammation of the bones terminating in the death of the part affected. This is a disease which has long been known to the world, although by the ancients it was confounded with caries. Between these two diseases at the present day there is considered to be a vast difference. For in necrosis the vitality of the bone is entirely lost and the dead portions are thrown off as are the soft parts in mortification. But in caries the vitality is not lost but impaired so that the process of ulceration proceeds in a similar manner as it does in the soft part.

Necrosis is a disease affecting children and adults more commonly than persons of advanced age although no period of life is exempt from it. The age which we find it most common is from ten to eighteen. The parts usually affected with this disease are the long and cylindrical bones rather than the

flat and spongy although every bone in the body is liable to be affected with it. When a bone becomes affected by necrosis the disease is usually found located in the shaft rarely extending farther than the epiphyseis of the bone this is probably owing to the head of the bone being formed from a separate point of ossification.

The causes which produce necroses belong to the classes which produce mortification in the soft parts they may be either of two classes internal or constitutional and external. of this former class are the low grades of fever small pox measles venereal disease scrofula and scurvy all of which are said at times to produce the disease of the latter class are injuries of any kind contusions lacerations caustics and what is a more common cause than most is the sudden exposure to cold and moisture when the body is heated above it's natural temperature.

The inflammation proceeding an attack of

necrosis may be either acute or chronic. in chronic the symptoms are of a mild character and the surface of the bone is only affected causing small excruciating pain of it to be exfoliated. but if the inflammation be acute the symptoms will be more violent and both the internal and external periosteum become involved terminating in a deposit of purulent matter between them and the bone. thus the bone being deprived of its ~~innervation~~ ^{innervation} becomes thrown off from the living parts the part thus thrown off is called the sequestrum

When a bone is about to be attacked with necrosis the first symptoms which appear are excessive pain referred usually to the neighbouring joint this symptom occurs in few hours after exposure after suffering these pains for several hours constitutional symptoms of a violent kind come on they are of an inflammatory type. the pulse is full hard and irritable the tongue is coated with a white fur there is great restlessness, agitation and sometimes delirium.

At first there is observed no tumefaction in the affected part but an increase of heat and throbbing pain. but if the part be examined after two or three days from the appearance of the symptoms it will be found slightly tender and tumid to the touch.

These more violent symptoms remain until about the twelfth day, when they begin to abate, if the part is examined at this time there may be perceived an obscure sense of fluctuation, and if an incision be made there will be found to be discharged an imperfect formed pus. after the formation of the pus the patient is left in a very comfortable state with the exception of fistulous openings which continue to discharge pus and at times pieces of bone. this state of things continue until the dead portions of bone is discharged and the openings heal up.

To form a correct diagnosis of necrosis will be found to be difficult in the forming stage as there are many diseases which commence with

like symptoms. the disease with which it is most apt to be confounded is rheumatism. from this it may be distinguished by the pulse. in necrosis the pulse is full hard and irritable while in rheumatism it is full frequent and easily compressed. inflammation in necrosis is found usually slower in its progress more deeply seated and the attendant symptoms are more severe. the skin retains its colour for a long time but finally becomes livid. the swelling involves the bone and when formed it is deeply seated and a long time in working its way to the surface. After the opening of the abscess, necrosis may be determined by an examination of the bone. if it be found rough and denuded of its periosteum we may infer that all such portions of the bone are diseased. It is also of importance to determine the extent of the disease whether it involve the whole bone or only the superficial part. of this we may judge from the extent and severity of the inflammation if it is of a mild

character we should infer that the disease had
extended to the superficial parts of the bone.
But where it was more violent we should judge
the injury of a more serious nature

It is common in a case of disease in a healthy
person where it arises in a person of good
constitution involving no bones in the neighbourhood
of important parts and where it is not of a
serious nature; on the other hand it is doubtless
when it is complicated with other disorders
and occurring in persons of a weak and
broken down constitution when it arises
from some unknown cause, and especially
when the articulations are involved.

Treatment in the first stages of necrosis
should be to promote resolution although
we have but slender hope of so favourable
a termination. To effect this various localities
means should be employed both local
and general the first among these is
bloodletting, this should be employed when
the patient is plethoric but care should be

employed not to reduce the system too much in
the commencement as it is a disease of long dur-
ation. cathartics, ~~may~~ ^{may} be all in connection with
bleeding of the the active saline ones or
calomel in large doses may be administered.
diaphoretic of antimony arsenic may be given
to determine to the surface after free evacuation
have been obtained opium may be given
to relieve the pain. to the affected part
leeches or cups may be employed after
their counter irritation by means of
plisters should be made over the part
If after these means have been employed
the disease is found to progress emollient
pottices may be applied and suppuration
hastened as much as possible. at this stage
of the disease it was recommended by Dr Smith
(formerly of the Institution, to make free
incisions down to the bone and also
to secrete the bone with a rhotin or common
gimblet. If there is reason to suppose the
internal periosteum involved this allows

the matter to be discharged as soon as formed
which would otherwise be a long time in working
it way to the surface. it also relieves the ^{for}skin
from distention and allows the ^{pus} to ^{escape} well
which otherwise being bound down ^{would} cause
great pain. After these means have been
employed the surgeon has accomplished
all that is in his power until the exfoliation
of the dead bone. at which time it may
become necessary to assist nature in her
endeavour to throw off the dead portion.
This may sometimes be done by removing
the portion with the forceps where it lies loose
in the part and the orifices of the ulcers are
sufficiently large to admit of its passage.
At other times it becomes necessary to make
large incisions and where the sequestrum is
inclosed in a case from the formation of new
bone around it to cut away the bone or
break up the sequestrum. This is done by
making an incision to the bone and
enlarging the openings in the new bone with

there are usually some leading to the old bone so that it may be extracted or the old bone may be broken up in pieces and extracted this may be done with the saw or the knife or as sometimes employed the gouge and mallet after the dead portions of bone are removed the ulcers heal kindly.

If necrosis arises from constitutional causes such as the venereal ~~disease~~ scrofula or scurvy the medicines calculated to cure these diseases should be administered before any favourable change can be expected in the state of the diseased bones



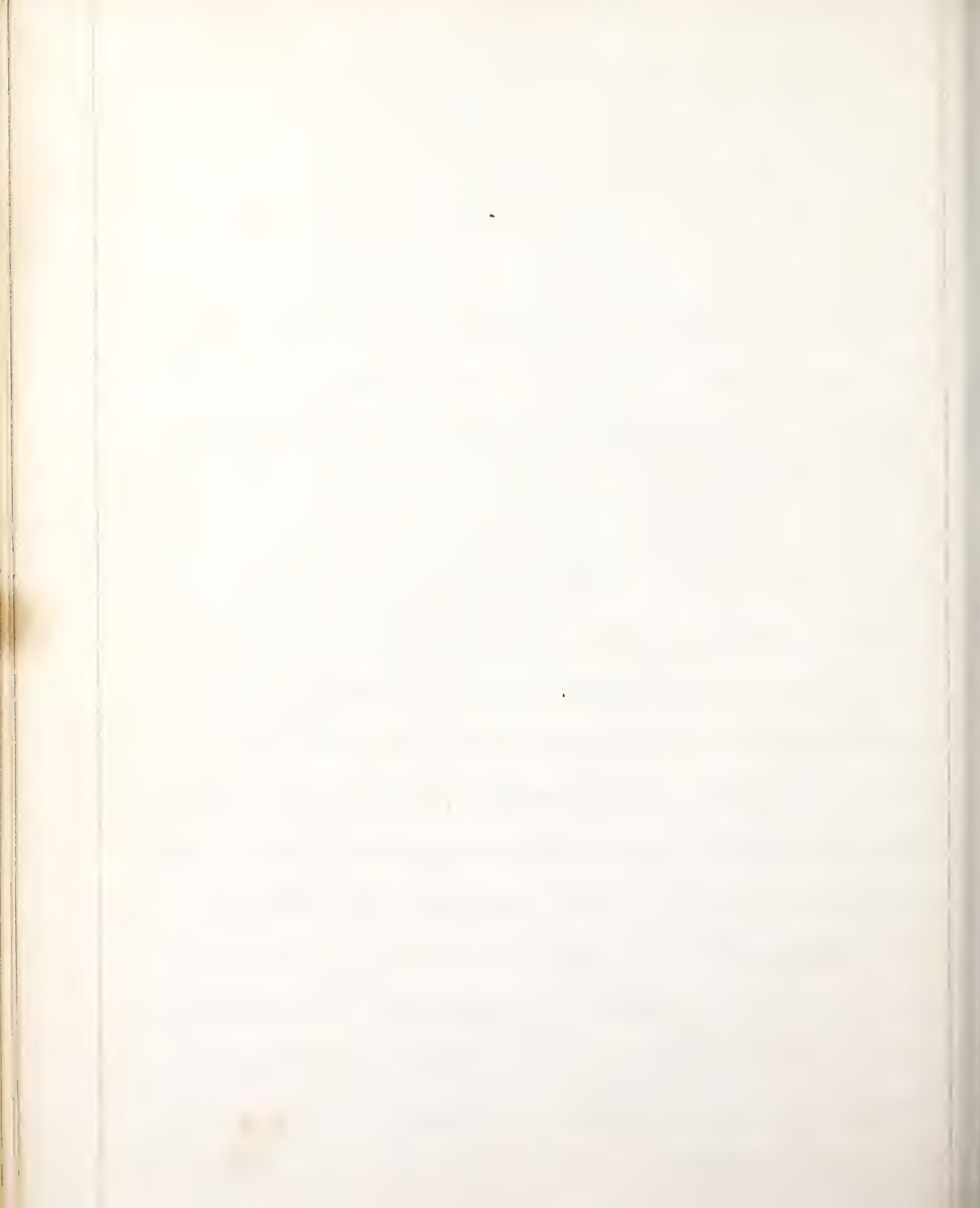
V.

(Dissertation
on
Scarlatina.

By
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We learn in the early history of man that as a condemnation for sin disease soon made its appearance, and in all ages, new diseases are recorded as having from time to time served as the severest scourge that could be inflicted on the human race. At what period the disease of which we are about to speak, first made its appearance it will be difficult to ascertain, the first recorded account we have of it is given by Prospero Mastiames an Italian physician, who wrote on this complaint as it appeared at Rome about



the middle of the seventeenth century. Soon after it made its appearance in London and was described by Sydenham & Morton, who term it *Febris Scarlatina*, according to these writers we are informed that the disease assumed its milder as well as its most character, the symptoms varying then as well as at the present time.

The disease described by Martianus resembled *Scarlatina* in its milder form as did the description given by Sydenham, Since the days of the above writers, it has been described by a variety of authors. De Haen observes this disease was hardly known in the sixteenth & seventeenth centuries—

In Spain it is said to have made its appearance as early as the year 1616 where it was called *Garrotila*, it assumed a malignant character, & from Spain it soon appeared in other countries of Europe—In it appeared, 1618, when it is said to have reigned for a number of years, destroying many of the inhabitants. It appears from these early writers, there was a distinction between *Scarlatina* and *Cynanche Maligna*, or they were more distinct than at



The present time, From the earliest history of this disease it was considered as being communicated by a specific contagion. That Scars latent under every form is contagious & sometimes epidemic is now admitted by our best writers; That there has been instances where members of the same family have been exposed to the influence of its contagion without contracting the disease it is true, and so it may be said of almost every contagious and many diseases that are both contagious and infectious, and likewise that this disease does in some instances make its appearance without any known or attributable cause as well as other contagious diseases, I believe to be equally true as far as its contagious character is concerned.

What that peculiar state of the atmosphere is which ~~is~~ strongly favors this disease, it might be difficult to decide with precision, I believe however that the condition which favors the generation of other inflammatory diseases favors this also, such as heat & moisture of the atmosphere also effluvia arising from many persons, confined in the same apartment



It has been known to assume all its various grades in different members of the same family, Children are considered as more subject to this than adults also females more liable than males. Dr. Ferri^{er} observes that it seemed particularly to girls from two to eight years of age, he saw but one child at the breast who had the complaint & that but slightly (Dr. Willson observes that it has been well ascertained that those who are under the age of puberty are most liable to the disease, The Scarlet fever (or Sydenham disease) may appear at any season of the year but it most frequently makes its appearance about the last of the summer or first of the autumnal month. Father Gill and others make similar observations & that it becomes checked by a severe winter — in some instances a succession of sharp frosts has checked its progress. It is said by some writers that Scarlatina never attacks the same person a second time, Others assert that where the disease manifests itself more particularly in the throat & fauces & but slight eruption on the skin the same individual is liable to a second attack affecting the surface more particularly. The instances



of this variation are not common,

Dr Good gives us two varieties of this disease

First Simple Scarlet fever, the symptoms of which are, Fever Moderate, & terminating with the rash little prostration, Slightly contagious

His second variety, Scarlet fever with a sore throat

He defines to be Fever Severe; Throat ulcerated; rash late in its appearance & less extensive; often

changing to a livid hue, highly contagious, &c

This last variety he says the morbid virus is chiefly directed to the fauces instead of to the surface generally

The rash moreover appears later by a day or two. Sometimes even a week. This last symptom will be found to

commence very early, if the throat be minutely inspected

The *Velum palatinum* will be found slightly inflamed

& also the uvula will appear to be a little inflamed

the pulse being at this time not more than slightly

disturbed, Gradually however the tonsils become

enlarged & exhibit a florid paleness on their surface

which extends over the whole surface of the palate

& its appendages, the tongue assumes a high red

color the papilla over its entire surface greatly,



elongated & very tender, there is often a considerable rigidity of the muscles of the neck & lower jaw. The throat is rough and inflamed from the second day of the eruption and deglutition is performed with difficulty.

All the common symptoms are more violent, the fever is more severe accompanied with nausea & vomiting of bilious matter, great heat & languor, considerable erythema & anxiety, head ache and delirium, evidently proving a determination to the head. The pulse is full, the respiration quick, the throat becomes excoriated & throws off a large quantity of minute superficial whitish sloughs which interfere with the increased flow of viscid (flow of) mucus & augment the difficulty of swallowing.

The sloughs generally separate about the fifth or sixth day, or at the decline of the efflorescence, which is the ordinary course, but in many cases the symptoms are still more severe and put on the form of *Scarlatina Maligna* or *St. Elsie's* which are alarmingly dangerous from the commencement, the symptoms of which are as follows: the pulse is small & ineffectual. There is a



Deep & heavy coma or violent delirium with claps, the ulcerations in the throat are deeper & broader, covered with dark brown instead of whitish sloughs, the tongue is encrusted with a dense black covering, & is exquisitely tender, the breath is foetid, the rash is extensive from the commencement, assuming a livid hue with intermediate patches of a ghastly paleness, and death ensues & on the sixth or seventh day.

Treatment The greatest possible discrepancy has prevailed in regard to the management of this disease. It has been stated by some of our best Physicians who stand ready to combat any disease, that they should prefer to be called to combat any other disease in our catalogue, than to a patient afflicted with Scarletina Maligna. We would judge from this that it is a disease difficult to conquer, which is the case of Scarletina Maligna, Although Dr Good says, after giving us many pages of history & contending about its name. He says the curative treatment need not long detain us. He says in slight cases of the simple variety he agrees with Sydenham, that the disease hurriedly calls for medical assistance, for almost



every neighbourhood. There are old women that will
cure you in the strongest terms of confidence & success
in their nostrums, telling, defiance to the Physician
asserting that they can cure more easily of Scarcina
than he who has spent a long life in the pursuit
of his profession. In the mildest form of this disease
it is probable that but few remedies are required
their nostrums may suffice but in the more severe
cases nostrums will not suffice, it requires more
powerful remedies to save the patient's life. To Good
days an emetic may assist in determining the
specific poison to the surface and hence has been
found almost always serviceable; & if the bowels be
confined an aperient may follow, but violent purging
will add to the irritation and destroy the effect of
the remedial course which is about taking place.
In his second or paristhmia variety (he makes his
indications of treatment are somewhat different. Says
that instead of the action being determined to the
skin it is powerfully reflected to the throat & head
and the fever is alarming, from its violence.
The intention is here to counteract this morbid



slow & regress of the febrile action, regard being
paid to the nature of the fever as well as its severity.
Bleeding he uses as the most direct & obvious means
of reduction, but objects to its use when there is a
strong tendency to a typhoid state, if typhoid
symptoms should prevail, local depletion should
be resorted to.

Dr. Withering who denominates this, rigidly
inflammatory abstained from bleeding & purgation,
confined himself in the onset of the disease to
Emetics.

Vomiting which Good recomme-
nds in the first species is still more necessary
in the present or second variety for it not only
tends to take off the dry burning heat of the
skin by producing general relaxation and
producing gentle perspiration but also tends to
unload the passages of mucus and serous fluids
which gorge and distend them.

Calomel or Pulver & Rheubarb are recommended
as cathartics if cathartics are in any measure
indicated. Opium in some instances would
seem to be indicated but rarely affords relief.



and generally proves injurious when there is a determination to the Brain.

Ammoniac in the form of subcarbonate is considered a useful remedy, in the dose of 10 grs in a ℥j of water repeated every three or four hours, it removes the mucus & stimulates the secretions without quickening the pulse, it is said in this way it has a highly beneficial & powerful effect upon the local inflammation of the Throat, Bleedings applied to the throat are considered highly beneficial, Cold affusion is highly approved of by Gouan - he says the fluid may be dashed upon the body of patient untill heat is subdued & on return of heat, should be repeated, he places much dependence on this as a remedy, at the same time antiseptic gargles are used freely.

Cruikshank says local bleeding by means of cups on back of neck or of leeches to neck may be practised with great advantage, after local depletion would apply cataplasm to the throat & neck, also thinks it possible that in cases of visceral inflammation general bleeding & the antiphlogistic measures should be employed. In the use of cathartics, says Vorwerk should be



kept open by those of a gentle kind such as
Rhubarb, Sulphate & Carbonate of Magnesia, (Castor
oil &c says active purging never admissible.)
The internal administration of Vinum Colchicum has
been found to exert a most salutary influence.
in the hands of some Physicians the dose being
from four to eight minims to Children age of four
to ten years & dose repeated in three or four
hours. The beneficial effects of this last remedy are
most apparent after the abstraction of blood by
local means. Capsicum has in some countries
& especially in the West Indies been used exten-
sively in this disease. The infusion of bark
bark and of other vegetable astringents are
spoken of as being highly serviceable on account
of their astringent property.

After the inflammatory symptoms have subsided
it is recommended that in cases of great prostra-
tion the vegetable Tonics should be administe-
red of which we have a great number, an infusion
of Cinchona may be chosen as one of the best.
Wine whey or Wine & water can be used at intervals



with advantage to the patient - nourishment
of a simple nutritive quantity should be employed
and in a manner not to disturb the patient.
The prophylactic treatment.

Belladonna has of late acquired a great
reputation in this disease (Jernglison
prescribes in the following manner
dissolve three grains of the extract in
one ounce of pure water of this give from
five to fifteen drops two or three times
a day in an additional quantity of
water. Sequel "Scarlatina, like measles is
frequently followed by various troublesome and
often dangerous affections, among which anasæra
is the most common, These swellings generally
occur about the ninth or tenth day after the subsi-
dence of the eruption, The dropsical effusion which
occurs after scarlatina, are not attended with much inco-
nvenience or danger, The parietal variety are
sometimes followed by abscess of tonsils, enlargement
of the parotids, inflammation of testicles, ophthalmia
ententes, Otitis, Bronchitis, also a great variety of nervous



diseases which are subdued by the ordinary mode of treatment, The more perfect—and obviously the cuticle desquamates, the less apt are secondary diseases to supervene during convalescence.

Diagnosis the only diseases with which scarlatina is liable to be confounded are measles and miliary fever, There is not a single symptom which can be regarded as absolutely peculiar and characteristic of scarlet fever says Eberle, In scarlatina the eruption generally comes out within the first forty eight hours of the fever; whereas in measles the rash rarely appears until the third, and most commonly not until the fourth day, The colour of the eruption of scarlatina usually resembles that of a boiled lobster shell, In measles it is generally of a darker red inclining slightly to brown.

The most prominent symptoms between these two affections are the catarrhal phenomena which are almost invariably very conspicuous in measles whilst in scarlatina they are either altogether absent or extremely slight & partial.

The inflamed eyes, profuse discharge of tears,



Sneezing, coryza, strong, harsh and hoarse cough
intolerance of light, (and) red and swollen edges of
eyelids, so seldom absent in measles, are but very
rarely noticed in scarlet fever.

In the malignant and anginous varieties of
Scarlatina the ulcers & sloughs which appear
in the fauces are sufficiently characteristic to
distinguish this affection from measles.
Also the nature of the exudate will assist
us in forming a proper diagnosis.

C. J. H. Chubbuck





VI

Dissertation
on
Nicotiana Tabacum.

By
Charles Cullen Cone,
of Westbrook,
Candidate for the Degree of Doctor in Medicine.



Nicotiana Tabacum.

Tobacco, its Properties & uses.

In treating of Tobacco, I shall omit its botanical description, its commercial history, and many other interesting particulars, in order to confine myself more closely to a description of it as a physical agent.

Tobacco is a sedative, Emetic, Diuretic, Galagogue, and under some circumstances cathartic; yet notwithstanding all this formidable array of therapeutical properties, Tobacco, in its different forms, often takes the popular nomenclature



of pipe, pipecut, quid, &c. these the official terms of the Pharmacopaeias;

Thus proving that community are quite as fond of this kind of medicine as the Doctors. Taken moderately in the form of cigar, quid, or snuff, it quiets restlessness, calms mental and corporeal inquietude, and produces a state of general languor and repose, which has great charms for those habituated to its use; but when employed in excess it enfeebles the digestive powers, produces emaciation and general debility, and lays the foundation of serious disorders of the nervous system.

Used in too large quantity at a time, it produces distressing nausea, faintness, vertigo, stupor, vomiting, coldness of the extremities, feebleness of pulse, &c., eventuating in alarming and perhaps fatal prostration.

Tobacco is used as a narcotic to produce relaxation in spasmodic affections;



in obstinate constipation, retention of urine in spasmodic stricture, and in strangulated hernia, for this purpose an infusion of 12 more than one drachm to one pint of water should be used commencing with only half of this.

It was formerly used as a diuretic in drops, but is little esteemed for this purpose at present.

The relaxation produced by smoking in a person unaccustomed to it, has been resorted to successfully in dislocation, and the same has relieved paroxysms of spasmodic asthma.

As a sialagogue it often relieves tooth-ache and rheumatism of the jaws.

Externally in the form of snuff rubbed up with lard and applied to the neck and chest it has been of great service in croup, in form of cataplasm it is of much value as an application to painful swellings, tumors, ulcers, &c.



It has been applied in the form of ointment, to tinea capitis, pruræ, and some other cutaneous affections, but should be used with great caution as it is liable in any form to produce unpleasant symptoms.

Thus gentlemen as short things agree best with my idiosyncrasy I have detailed in short the effects of Tobacco as a physical agent.

Some of you perhaps know from personal experience whether I have done it correctly, those of you who cannot apply this test, I would respectfully refer to my own source of knowledge under such circumstances, my respected teacher in materia medica, and "the books."

Cone. —



VII.

(Dissertation
on
The Contra-indications of Mercury.

By
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Of Bristol, Rhode Island,
Candidate for the Degree of Doctor in Medicine.

On the Contra-indications
of Mercury
and the Limitations of its use.

The action of the preparations of mercury is, in general, stimulant, alterative and deobstruent, and irritant. They operate through the medium of the circulation, by nervous sympathy, and by direct contact. Their effects are variously modified by the particular preparation used, the mode and frequency of administration. When so administered as to affect the constitution, their primary action is the stimulant. This action is general upon the circulating system; the circulation becomes equal-

ised; the pulse becomes quick, tense and sometimes full. Hence the great value of these medicines to obviate local congestion and topical inflammations.

Being introduced into the system, the next action of mercurials is ^{irritant and} attractive; and (in the case of some of the preparations) irritant. The action of the absorbent and the glandular systems is both altered and increased. The perspiration, the urine, the fluids of the alimentary canal, and more especially the saliva and the bile, become more abundant and are essentially changed in character. The blood presents the buffy coat and is of an increased consistence. Some of these consequences are so obvious as to be made the criteria of the constitutional effect of the medicine. Hence, as the best means of judging of its further indication, the saliva and the perspiration are carefully observed. The attractive virtues of mercury render it invaluable in many diseases, when nothing else affords a reasonable hope. In many affections of the liver it is of the greatest service; and in syphilis it takes rank as a specific, if indeed

any medicine can lay claim to such a title. It is ~~perhaps~~ from its alterative action that it is of so much value, in minute doses, in diarrhoea and cholera.

Calomel, in doses of from ten to twenty grains, is highly valuable as a cathartic & counterirritant. It increases the peristaltic motion of the bowels by direct contact. [Thw, by producing catharsis, it also produces counter-irritation and so diverts the force of disease from other and distant parts.] If an equal quantity be divided and given at intervals of two or three hours, it acts in still another way upon the intestinal canal. It irritates the orifices of the ducts opening into it and thus by nervous sympathy excites the secretions which are subservient to the process of digestion.* But the pure cathartic power, by increased peristaltic motion without affecting the secretions, may be secured by a large dose of calomel combined with twice the quantity of jalap. 'This compound will pass so rapidly through the intestines as to produce little or no effect on the secretions.' Thw, in

* I've' appendix to Hamilton. p. 201.

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many cases of obstinate constipation also, mercury is an important remedy.

In many ill-conditioned ulcers and in some cutaneous diseases, the topical application of some of the preparations of mercury, in powders, ointments or fumigations, are valuable alterants. The mercurial ointment produces, by ^{its} absorption, the same constitutional effects as when the mineral is taken internally. And in some conditions of the stomach and intestines this is the preferable form for its exhibition.

Such are the general principles on which mercury acts in producing its various salutary effects. It is not the purpose of this essay to enter upon the consideration of the particular diseases to which it is applicable, but to state the effects of its injudicious use, and to point out the restrictions under which it should be employed.

It has already been said that the first effect of mercury is to stimulate the heart and arteries. There is an altered condition of the whole circulating system. The blood is changed in character; an inflammatory diathesis is produced.

It is only necessary to conceive this state of the system to be ^{aggravated} exalted by some untoward circumstance, and the diathesis becomes disease. That febrile condition is induced which is called the 'mercurial fever'.

A febrile state of an atonic character, called [by Pearson] the 'mercurial erythema', is sometimes produced by mercury, and is one of the most alarming of its dangerous effects. "This state is characterized by great depression of strength, a sense of anxiety about the præcordia, irregular action of the heart, frequent sighing, trembling, partial or universal, and a small, quick and sometimes intermitting pulse, occasional vomiting, a pale, contracted countenance, a sense of coldness; but the tongue is seldom furred, nor are the vital or natural functions much disordered." ^x During this disease "a sudden and violent exertion of the animal powers will sometimes prove fatal." It generally comes on suddenly and before the physician is aware of its approach. This effect of mercury appears to be the poisonous action

^x Pearson is quoted by 'Lectures on the venereal' about p. 44.

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upon the constitution, affecting principally the nervous system.

Other evil effects arise from its action upon the glandular system. Though, as a general rule, we are to judge of the constitutional effects by the soreness of the gums and mouth and by the amount of salivation, yet there are cases in which there is an excessive secretion from some one of the secretory organs while the others are but little affected, and the constitution appears to receive no impression. In these cases, the organs usually so excited are the salivary glands. But excessive salivation is more commonly attended by an excess of mercurial influence through the whole glandular system, producing upon the constitution most disastrous consequences. Instead of the usual tenderness of the gums, the metallic taste, ~~and~~ the fetid breath and the increased flow of saliva, ulceration now appears about the mouth and fauces, the tongue is so swollen that it hangs out of the mouth incapacitating the patient for either eating or speaking. The salivary glands are enlarged, inflamed and very painful, and

the flow of saliva becomes excessive and sometimes enormous. In one instance, sixteen pounds were said to have been evacuated in twenty-four hours. The gunglough, the salt complaint, and occasionally necrosis of the alveolar process takes place. The whole system partakes of the disease. The excessive drain of its fluids made by the excretory functions tends to impoverish every part of the animal economy. The blood thus impoverished by the excessive action of the organs of absorption, of secretion and of excretion, the consequences are obvious — irritability, debility, emaciation, death. The system is drained of its vitality, and if the patient escapes fatal hemorrhage by sloughing, death by inanition is the result. We have here represented one extreme case of this disease and one seldom witnessed. Yet such is the character and the tendency of excessive salivation, whether it occur in a milder form or whether it be allowed to go on to these distressing results.

An effect analogous to the last is that produced by excessive secretions from the liver the pancreas and

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the mucous membrane of the intestines. Violent purging
often, frequently attended with griping and san-
guinous evacuations; also with fulness of the left hypo-
chondrium, burning pain and tenderness of the region
of the pancreas; and the evacuations are frothy, a bit-
ter, tough and often greenish (at least in the com-
mencement) from intestinal bile." ^x Excessive secre-
tion of urine and profuse sweating are other analogous ef-
fects of the same cause. Enlargement of many of the
glands are sometimes produced.

Another class of consequences is certain diseases of
the skin. One of these is a peculiar eruption, known as the
mercurial erythema. It occurs in the early periods of the
mercurial course, and is accompanied by some slight in-
dication of approaching syphilis. It is attended by an
uneasy sense of itching, and spreads a itch over the limbs
and body commencing usually in the groin and between
the scrotum and the thighs. It is accompanied by
slight ^{which} fever, ^{which} depends for its degree and character upon
the habits and constitution of the patient and
the severity and duration of the eruption. This

^x Pereira. vol. 1. p. 588.

disease is not often severe.

Another and a more painful and trying disease of this class, and "allied perhaps to the foregoing", "is an excoriation of the skin on the corresponding surfaces of the scrotum and the thighs." "It commences in the angle between the thigh and the scrotum, and spreads over the entire extent of the opposed integument of those parts, and a profuse discharge of a very fetid nature takes place." "The patient is deprived of sleep by day and by night; but cannot attempt the slightest movement in the bed without inducing severe pain. The degree of attending form also is very severe." ^x

Thickening and adhesion of serous membranes, particularly of the pericardium and ^{the} pleura costalis, also "partial adhesion and thickening of the cellular membrane in contact with the fasciae and extremities of the muscles" [†] are occasional consequences of the inflammatory diathesis induced by the exhibition of

^x Collis on the venereal. p. 42.

[†] Hamilton on the Use and Abuse of Mercury.

mercury.

The effects of mercury upon the nervous system vary in different cases, from those comparatively slight to the most severe; and sometimes they continue through life, with irregular and feeble action of the heart and with all the distressing consequences of great nervous derangement, without, however, much disordering the vital functions.^x

From these consequences of the injudicious use of mercury (and from some others of less importance) it must be sufficiently evident that the mode of administering a medicine so potent for good or for ill, and its contra-indications should be understood by every practitioner. Unfortunately there are some cases in which the evil cannot be prevented, and therefore cannot be avoided. Some patients suffer the most severe symptoms from the most trifling dose of mercury, while others seem to be proof against the most powerful and persevering efforts to affect the system by it. ^{There is} therefore rule to

^x Hamilton on the Ven. & Abus. p. 13.

guide us in discerning such idiosyncracias; and the only practical principle which can be suggested is that when mercury is to be administered to a patient for the first time, we should feel our way with the greatest caution, watching every step of its progress, before we proceed to such an exhibition of this remedy as is prudent in a large majority of instances. In almost all cases, however, a regard to certain general principles and ascertained facts will very materially aid us in avoiding disastrous consequences. By a neglect or ignorance of these alone can ~~the~~ such consequences often occur.

In the first place, then, when the character of the disease is such that mercurials seem to be strongly indicated, we are to consider the state of the patient's constitution, his temperament, his age, and the climate in which he resides. Residents in hot climates are very seldom severely affected by mercurial influences, though they are very susceptible to the constitutional effects of mercury. To them, therefore, mercury is both a safer and a surer remedy than with us. In very young patients the exhibition of mercury is very seldom otherwise than

perfectly safe. It is doubtful whether a child of less than two or three years is ever salivated. After this, the susceptibility to the constitutional action of mercury is gradually increased. A narrow condition or confinement is in some degree a contra-indication to the exhibition of mercury. The action of mercury is sometimes, as before mentioned, violent upon the nervous system, producing permanent and distressing effects, and sometimes bringing on paralysis, epilepsy or mania. Hence in delicate, narrow females, this remedy should be used with particular caution. In cases of extraordinary morbid action, however, as in mania, when dependent on disease of the liver and the alimentary canal, and in tetanus, mercury is said to have been employed with good results.

But the circumstance to be most carefully attended to is the state of the pulse. Mercury is contra-indicated either by a morbid force and activity of the arterial system, or by a very feeble action of that system. A pulse somewhat less full and quick than that of health is probably the most favorable indication for its exhibition. Hence, in the automic stage

of inflammatory diseases it cannot be used with advantage until the system has been reduced. This reduction is usually to be accomplished by the use of the lancet, or by cathartics, or by both. Or, if such measures are contraindicated, and especially if the perspiration and the other secretions are deficient, antimony may be exhibited in combination with calomel, sometimes with the happiest results. The antimony is here valuable both for its influence upon the secretions and upon the arterial action. But unless some means can effect a reduction of the tonic action, mercury in any form can be exhibited with but little hope of benefit.

On the other hand, in a state of debility indicated by a very feeble pulse, this remedy should either be delayed until the system is strengthened by a course of tonic treatment, or it should be employed in combination with tonics. The iodide of mercury is especially recommended in scrofulous affections. By such means, the constitution which would have successfully resisted every attempt to control it by mercury may be induced to yield readily to the power of that agent, and the disease is effectually dis-

curbed and subdued.

There is another consideration, possibly of some weight, to show the importance of securing such a condition of the constitution as shall give promise of success, before applying the mercurial treatment. It is stated that a large amount of mercury has sometimes been thrown into the system without producing at the time the slightest apparent influence; and when by accidental circumstances the constitution has undergone some change, immediately violent mercurialization has followed; and that at a time when such an error could produce any mischief. This fact (if allowed to be a fact) would also suggest the importance of withholding mercury as soon as we have evidence that the system is not for the time impassible by it. We should not be likely, in attempting to subdue an enemy, to incur more expense and more hazard than would suffice either to conquer him or to prove him invincible.

The debility of strongly morbid scrofula, however, is a decided contra-indication of this medicine, and refuses to give way even to the prepor-

atory measure by tonics sufficiently to render mercurials of any avail. But it is a valuable remedy in cases of scrofula having a syphilitic origin, if administered before the system becomes very much reduced.

The internal exhibition of mercury is contraindicated by great irritability of the stomach or the intestinal canal. Even under these circumstances, however, its virtues are still available in the form of the ointment applied to the inside of the thighs or to some other part of the surface where the skin is thin. But even in this mode of application, its influence on the intestinal canal is sometimes so violent as to compel its discontinuance.

It may be in place here to remark that when, in its internal use there is danger of losing its constitutional effects in consequence of its running off by the bowels, this event is very commonly prevented by its combination with opium. And when, on the other hand we wish to avoid its constitutional effects, it should be combined with jalap or some other vegetable cathartic, should be followed in the course of eight or ten

known by a different purgative, and should not be repeated too soon.

Another circumstance, which should put us on our guard against the too violent action of mercury, is the existence of ill-conditioned ulcers, sores, scrofulous sores, scirrhous tumors and cancerous affections in the patient. In some stages of those affections they must be aggravated by the diminished vitality consequent upon the exhibition of this medicine.

Having decided upon the exhibition of mercury, our next care is to proceed with proper precautions. If the object is to bring the constitution under the influence of the medicine, it is usually proper to give small doses - say of calomel about grs. j-ij, or of the blue pill about grs. jr, - repeating the dose once, twice or three times a day, until a slight soreness of the gums occurs. This usually happens in from six to ten days. It is sufficient to shew the constitution to be under the influence of our remedy. The same treatment is to be ^{either} continued, or suspended for a time

and then resumed, or at once and entirely abandoned, according to circumstances.

If we have no means of judging beforehand of the particular susceptibility of the patient, (and we can have none, if he has never tried the experiment) prudence may require us to commence with doses smaller than this and to increase them gradually if they do not operate unfavorably. Whenever symptoms of an unfavorable action appear, the medicine should be immediately discontinued. But, ordinarily, when ptyalism is once fairly induced, we have no reason, with proper precautions, to apprehend any mischievous result. We may proceed boldly, but prudently, to keep up the ptyalism as long, or to push it as far, as is necessary to effect our purpose in its exhibition.

From the inflammatory diathesis induced by mercurial treatment, it is easy to infer that all temporary and accidental causes of inflammation must be avoided while under that treatment. This caution is said to be of the utmost importance to secure to the patient the

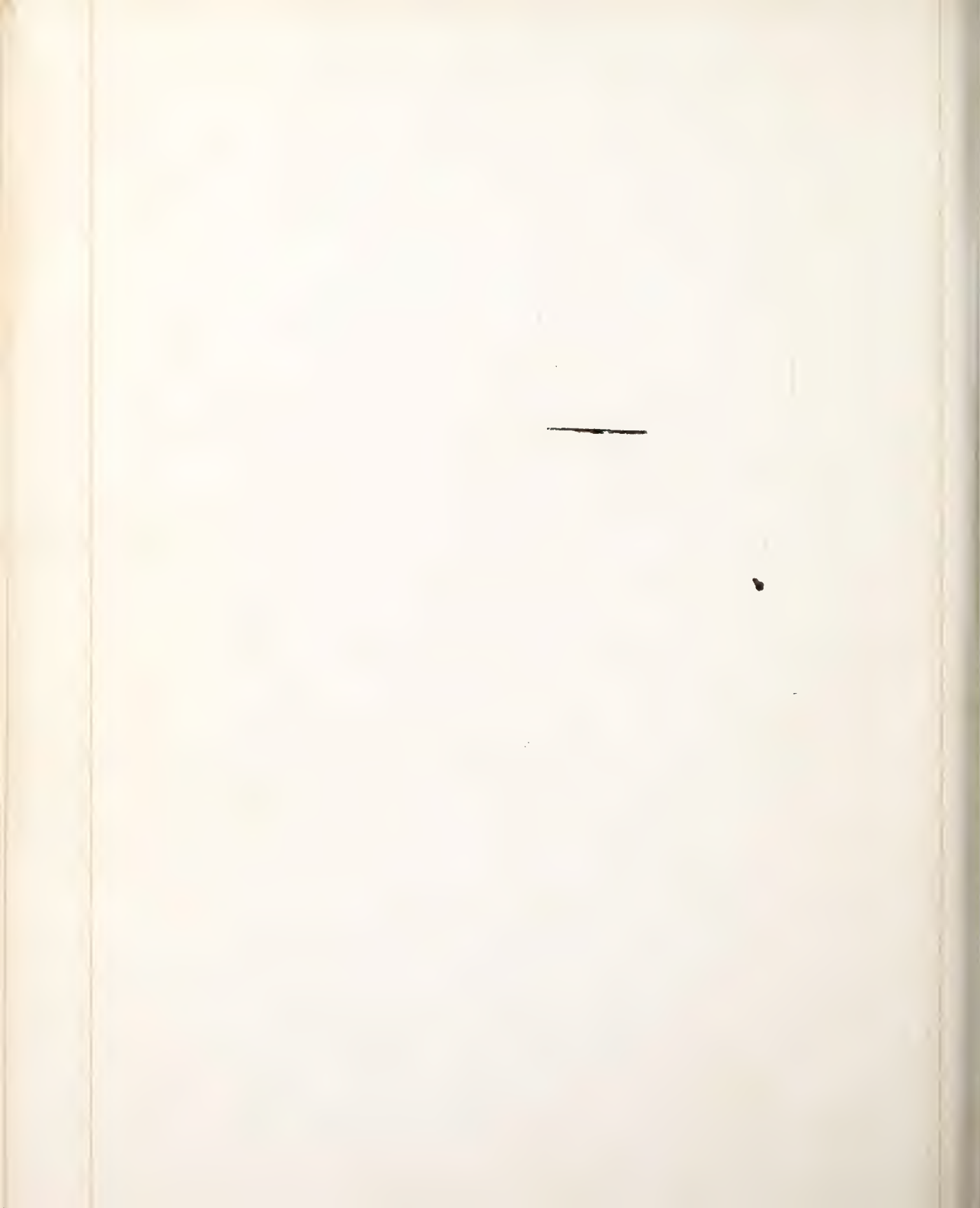
safe and effectual employment of the remedy. Every thing which will predispose the system to be impressed by revitalizing agents must be studiously avoided. Especially will this remark apply to all exposures to cold and moisture and great alterations of temperature, to irregularities and excesses of all kinds, to stimulating food and to impure air. The daily use of the warm bath during the same period has also been highly recommended. The clothing should be daily changed and thoroughly cleaned and aired. Vegetable dietetics should be freely worn. And after the mercurial course is finished, the patient should still continue the same precautions, for two weeks or more, returning by gradual advances to his usual exercise and exposure.

These observations, it is believed, embody the general principles of the contra-indications of mercury and the limitations of its use. Instead of being an agent always to be dreaded and avoided, as some have been led, by its abuse and its injudicious use, to believe, it may be, and

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it is, in the hands of the prudent and sagacious
practitioners, an agent of good to suffering human-
ity, the loss of which would be irreparable.

N. B. Cooke -
New Haven. Jan. 20. 1847.





VIII.

Dissertation
on
Scarlatina.

By
Thomas Cuddeback,
of Port Jervis, New York,
Candidate for the Degree of Doctor in Medicine.



Scarlatina

Among the numerous exanthematous diseases to which the human body is more or less exposed, and which frequently give rise to many other diseases more severe in their character, and much to be feared by persons afflicted may properly be ranked scarlatina.

Owing to the discrepancy of authors as regards the character of this disease and the different symptoms which characterizes different epidemics in different localities, it will be extremely difficult to describe with precision the particular symptoms as existing in different epidemics.

Diagnosis

Scarlatina is one of those forms of cutaneous diseases which is said to arise from a specific contagious miasma; but it is the opinion of many medical writers and I believe is generally allowed that peculiar circumstances may exist which render it possible and even probable for this

affection to be generated independent of any contagion.

Persons who have been once afflicted with this disease are not liable to a subsequent attack, yet there are cases stated where the second and even the third attack have been noticed.

This disease is characterized by minute red spots appearing on the surface of the body about the fourth or fifth day after exposure to the contagion; which gradually run together forming extensive and irregular patches not unfrequently covering the whole surface of the body.

The eruption is always preceded or accompanied with fever, slight shivering, lassitude and increased debility are always present among the first symptoms of this disease.

This disease was not known or was not distinguished at a very early period in this country as a distinct disease; it is supposed to have been confounded for a considerable time with Rubella, a cutaneous

disease somewhat similar in its character and appearance, and yet not appearing to resemble each other in any particular form of the eruption. The particular differences which characterize these two diseases are said to have been first fully described by Dr Withering. — It is claimed by some Physicians that this disease is easily enough distinguished at the present day from Rubiola by the eruption itself; but in those cases where an erythema is present, or a peculiar rash similar to the eruption of scarlatina, occupying the interstices between the papulae in Rubiolas I can conceive of its being extremely difficult to distinguish between these two diseases.

The papulae in Rubiolas are more elevated above the surface than in scarlatina and usually of a darker color existing in semilunar clusters not presenting that universal redness which particularly characterizes scarlatina, ~~the deep red~~

also the peculiar phenomena which accompany scarlatina, the deep red color of the eruption and the sore throat will readily distinguish it from that disease. The character of the prevailing epidemic will enable the practitioner at the commencement of the disease to form a diagnosis with considerable accuracy.

The strongly marked catarrhal symptoms that almost invariably accompany Rubella as the copious weeping and inflamed eyes, harsh and coarse cough and sneezing which are so seldom present in scarlatina will afford sufficient diagnostic marks as to obviate any danger of mistake. Those cases which terminate fatal are generally spoken of as being complicated with affections of some of the serous membranes - Encephalic, Thoracic or abdominal.

Effusions into the cavities of some of the larger joints of the body which

generally have a fatal tendency, have been regarded as an implication of this disease - Gangrene, Mortification, and Sphacelation have all been spoken of as affecting different parts of the body during this disease - Inflammation and suppuration of the glands of the neck frequently take place, and occasions at times great destruction of parts and the tumors are described as pressing upon the Larynx at times to the extent of producing suffocation.

Another form of scarlatina is described by some writers which is termed the Hemorrhagic, and generally called a fatal form of the disease, being indicated by the common signs of Purpura here and there appearing dark spots which is followed by exudation of blood from the mucous membranes and more especially from the mouth & nose, which is sometimes so profuse as

to cause death. The blood is said to flow sometimes from a mere puncture with as much force and duration, as if an artery had been divided.

Scarlatina has been spoken of as being a disease that might be confounded with scarlatina, but generally the mildness of the disease as well as its duration is supposed to be sufficient to be sufficient to distinguish it from scarlatina, the form and regularity of the eruption is also spoken of as a diagnostic symptom.

The most common complication of this disease, or that which more frequently terminates fatal is that of anasarca, which appears in the face, eyelids and extremities, frequently it becomes general and also appears at times in the different serous cavities.

Scarlatina is divided into three distinct varieties or classes, namely - Scarlatina simplex, Scarlatina Anginosa,

and Scarlatina Maligna —

Symptoms of Scarlatina Symplex

Scarlatina Symplex is much the mildest form of this disease, when occurring in a healthy individual it is a disease almost entirely devoid of danger, yet serious consequences might result from the superintention of hyperaemia, which should always be kept in mind —

The eruptive fever of this disease varies very much both in intensity and duration, appearing at times so extremely slight as hardly to require any medicinal aid, and at other times raging with so much violence as to require the most prompt and energetic treatment. After the ordinary premonitory symptoms of febrile disease have been present for a period varying from one to five days, general depression, nausea and vomiting, pain in the back, loins, lower extremities and head with slight chills, flushes of heat, quick &

frequent pulse, are the predominant symptoms for a short period before the appearance of the eruption. Sometimes there is Epistaxis, skin generally dry and hot, the tongue is usually covered with a whitish fur through which the papilla will be seen to project. The face becomes swollen, the eruption appears about the face and neck, which become covered with small red points; these points or spots gradually coalesce become of a vivid red, diffused in large irregular patches over the trunk and upper extremities. The eruption in the bends of the joints, upon the loins and nates is described as being of a more vivid color than upon other parts of the body. If the hand is passed over the body a sense of roughness is felt which is owing to the enlargement of the papillae. The skin is burning hot, tense and dry. If the patient be examined at this time the surface is said to present

the appearance of a boiled Lobster—
The soft palate, fauces and internal
surfaces of the eyelids present the same
brilliant hue. Deglutition is often extremely
painful and difficult. Delirium and
coma sometimes accompany the eruption.
The eruption is usually the most vivid at
about the fourth day, after which it gradu-
ally declines, and desquamation generally
commences about the seventh day—

During the subsidence of the eruption, the
tenderness of the fauces gradually abates &
the healthy action of the skin is reestablished.
The urine deposits a reddish sediment,
and sometimes a diarrhoea takes place.
The process of desquamation is usually
attended with a considerable itching which
sometimes continues for several days—

The duration of this form of scarlatina
is generally from eight to ten days.

Symptoms of Scarlatina Anginosa.
Scarlatina Anginosa, is a more severe form of this

disease, affecting more particularly the
throat and adjacent parts, as its name
indicates. The eruption in this form of the
disease does not appear so early as in scar-
latina simplex, nor does it diffuse itself
over the surface of the body in such
regular patches. The eruption is said to
disappear sometimes the day after its
appearance, and afterwards return, a-
gain, thus lengthening the disease, and
rendering the desquamation irregular.
This form of the disease is attended with
general muscular prostration; the skin
is intensely hot, and thirst generally ve-
ry great; the febrile action is rapidly de-
veloped, the pulse is quick and frequent,
but not so tense and full as in scarlatina
simplex. Headache, nausea and some-
times vomiting are present in the form-
ing stage of this disease; not unfrequently
pain in the muscles of the neck and laryn-
geal gland precedes or is present at the

commencement of this complaint
The (palate, Tonsils, uvula and fauces
present) a bright red and shiny appear-
ance. The Tonsils soon become greatly
swollen, the voice hoarse and deglu-
tition extremely painful and difficult,
and sometimes the liquids which the
patient attempts to swallow are returned
by the nostrils, a sensation of constric-
tion is felt about the throat and at
the same time respiration is painful
of the swelling and inflammation of the
fauces continues for several days, the disease
is apt to terminate in ulceration, small
ulcers may be seen about the Tonsils &
palate, which soon become converted into
superficial ulcers of an ash color; a large
quantity of mucous mucus is secreted
generally about the fauces, and some-
times is said to congregate in white filaments
upon the tonsils so as to be mistaken
for ulcers when in reality there is none.

Occasionally these plaques assume a brown color, become enlarged and discharge an acrid, sanious fluid. The glands about the neck at this time, are hard, swollen and painful. This form of the disease is frequently complicated with visceral inflammation which generally proves fatal in the course of six or seven days.

Symptoms of Scarlatina Maligna
Scarlatina Maligna is a still more frightful form of this disease, in which there is always a tendency to putrescence. In the beginning of this form, the disease is described as presenting very much the appearance of Scarlatina Anginosa, but the violent Typhoid symptoms of this disease will soon enable the practitioner to distinguish between these two forms of this disease. The eruption in this form of scarlatina appears at a still later period than in Scarlatina

Anginosa, which is at first pale (but) soon becomes of a dark and livid color being very irregular in its appearance and duration; frequently disappearing and reappearing again at the end of two or three days. Delirium and coma is a common occurrence in this disease, the eyes are generally red and the cheeks darkly flushed, the breath is fetid and the tongue usually covered with a dark brown fur. The tonsils and palate frequently become covered with dark colored sloughs. Difficult respiration with a rattling noise in the throat, is frequently occasioned by the great secretion of a viscid mucus into the lungs. Frequently there is an acrid discharge through the nostrils, which occasions great irritation to the parts over which it flows. The fever and the affection of the lungs are spoken of as a common occurrence without an eruption at any period of the disorder. Death frequently takes place as early as the

second or third day, and at other times the symptoms continue moderate, until an advanced period, then suddenly putting on the most malignant form, after great prostration of all the vital energies, exhausting diarrhoeas often takes place, and in some cases hemorrhage from various parts; the tongue at this time is dark brown or black — Pulse very frequent, and feeble —

Some writers have spoken of three modifications as belonging to Scarlatina Maligna, namely, the Inflammatory, Congestive and Mixed. The different symptoms to which those terms are applied. I will not now attempt to describe.

Prognosis

This of course must be very variable, depending altogether upon the nature and character of the prevailing epidemic, requiring at all times to be made with a great degree of caution, as the symptoms

of the mildest form of this disease sometimes suddenly change to those of a more alarming character; the first form of this disease or scarlatina simplex is rarely attended with any danger. As regards the Anginous affection of this disease something of a diversity of opinion exists in regard to the general fatality of this complaint. Although there is always more or less danger attending this form of scarlatina, yet there is generally a natural tendency in this throat affection to terminate by resolution, the danger always being in proportion to the severity and extent of the local inflammation. The appearance of the eruption aids considerably in the prognosis of this complaint - when it appears regular, uniformly diffused over the surface and of a bright red color it is much more favorable than when the eruption presents a dark brown or

pale color Excessive tumefaction of the throat and the adjacent parts is considered an unfavorable symptom, but the tumefaction of the fauces when of a bright red color is a more favorable symptom, than when the inflamed fauces without tumefaction present, a dark red or livid color Early delirium is a very unfavorable symptom, gangrenous ulceration of the throat is always alarming - A violent fever in the commencement with considerable angina is very apt to bring on early collapse Oedema of the glottis has in some cases speedily destroyed the patient The prognosis in scarlatina Maligna is unfavorable and should always be very guardedly given - A livid appearance of the eruption is an unfavorable symptom as in scarlatina anginosa - hurried respiration, small and frequent pulse with great prostration of strength, copious or bloody urine with

involuntary discharges from the bowels are very unfavorable symptoms. A regular subsidence of the fever and eruption, with the healthy granulations of the ulcers and desquamation of the cuticle may insure a favorable prognosis—

Causes

As regards the cause of scarlatina, but little is known. It prevails in epidemics and is considered generally to be contagious, yet there are many persons who deny altogether, that it is at all communicable. This disease is spoken of by some writers as being most common in countries of a moist and cold climate and particularly towards the equinoxes, when the atmospheric changes are most prevalent. This disease is more common among children than adults, affecting females more than males; and from W. D. Douglass's statement the fatality of this complaint

would seem to be greatly diminished after the age of ten years, but, upon this point, there seems also to be a diversity of opinion.

Pathological Characters

Frequently on the dissection of those who have died of scarlatina, the morbid appearances are wholly insufficient to account for the fatality of this disease. Dr Macintosh states that the most constant morbid appearances seen by him, have been the ulceration, thickening and vascularity of the mucous membrane in the air-passages. In two cases mentioned the epiglottis was nearly destroyed by ulceration. The air-passages have been found sometimes filled with a thick tenacious matter. Appearances of inflammation are not infrequently present in the chest and other parts of the body.

Treatment

As regards the course to be pursued in the treatment of scarlatina much of course depends upon the nature and character of the prevailing epidemic. The course of treatment indicated in one epidemic, might be contraindicated in the next; and in consequence of such a variety of symptoms in different epidemics, there must of necessity be a great diversity of Treatment. Scarlatina simplex as before remarked is often times so extremely slight as hardly to require any treatment. Mild laxatives or simple injections are generally necessary to remove the constipation and some mild emollient gargles with the simple antiphlogistic regimen is frequently all that is necessary. If the disease presents symptoms of considerable Irritation with great heat of the surface, the body should be thoroughly sponged with cold water and vinegar, acidulated, unalluginous drinks should be freely taken, Ice should

be freely used; also the common Soda
or the mineral waters of the shops are
recommended; in some cases it may also
be necessary to bleed for the purpose of preventing
hyperaemia in any of the internal organs.
Emetics are used in the early stages—
Fresh air and cleanliness is an important part
in the treatment of this disease as well as in all
others of a similar character. When the ordinary
premonitory symptoms of this disease are coming on
the treatment should not be delayed until we can
decide as to the character or form of the complaint.
The early exhibition of an emetic, followed by a
 brisk cathartic will do much towards preventing
the disease from running into the more severe
form. The Anginous variety requires more
active measures. Leeches about the throat &
head are by some very highly recommended,
they are said to afford immediate relief
if the ^{symptoms} are severe general bleeding is necessary.
The heat of the throat & mouth is usually very great
and cold water & ice should be freely allowed.

Gargles of Chloride of soda or lime are recommended, if the operation is very painful and difficult, the use of the syringe may be resorted to - Purgatives and emetics are considered as rather a doubtful agent, yet the bowels should unquestionably be kept free and open by some gentle cathartic Stimulants are sometimes required and should be given as in ordinary Typhus, Ammonia is sometimes given with good effect, but wine is generally used & in large quantities manytimes If there is inflammation of any of the internal organs so as to render cold water and purgatives inefficient recourse must be had to blisters, sinapisms and venesections If the eruption needs the hot bath and friction are good remedies Stimulants are sometimes used both externally and internally But great caution is necessary in their administration for fear there may be present internal inflammation

As regards the treatment of *Scarlatina Maligna*
I will say only a few words. Although it is
the most formidable form of this disease, much
of the treatment in this complaint is not essen-
tially different from that of *Scarlatina benigna*.
Emetics are thought by some to harass the pa-
tient too much in this form, but they are doubtless
sometimes necessary. When the pulse is tense, ~~and~~
and frequent and the other symptoms severe
venesection should be resorted to, but in the
later stages blood should be very sparingly
taken. Prompt and active stimulants are
sometimes necessary - when the brain is not
particularly affected, Camphor & Opium is used,
Capsicum is highly recommended, there are
also numerous other remedies used in this
and the other forms of *Scarlatina* to which
I cannot allude at present.

6 Elm Street House, Jan 15th 1847
Thos. Cuddihy

~~IX.~~

Dissertation
On
Tumors of the abdomen.

By
John Seacon,
Of New Orleans, Louisiana,
Candidate for the Degree of Doctor in Medicine.



Tumors of the Uterus.

This is a subject on which authors have said but little and yet one which is fraught with a vast amount of interest. It might at first glance appear that the diagnosis of Tumors of the Uterus would be more simple than that of most diseases of structure in the female for the size and position, location of the tumor might seem to afford facilities for examination not to be found in the long wall of the latter. Experience however, does not conform this natural expectation. The functions of the Uterus & Tubes are more to be terminated and distinct, and the means of ascertaining their operations are, I think to consultation, more precise than in this case with respect to the disease of the abdomen. The cases connected in the diagnosis of Tumors of the Uterus, are of such frequent occurrence, and so glaring

that the magnitude of being acquainted with all that is contained in the subject, cannot be made apparent to all minds in the same manner. We therefore the professors with credit & advantage.

It is well known that, in a state of health, "certain viscera are contained in certain regions of the Abdomen": these viscera, however, it must also be remembered, are very loosely attached, and may be easily moved to a considerable extent. Even in a state of health and of youth, from their natural position. We should therefore be exceedingly cautious how we affirm that, because a tumor exists in a certain region, it of necessity is connected with the viscera naturally contained in that region.

We are told by some, that when the internal characters of such tumors are obscure, and inconclusive, the determination of the situation of the affected organ will be always as good as impossible.

-able as to establish a satisfactory diagnosis.

This thought is by no means the case, as is conclusively shown by practitioners of distinction. As an instance, Tumors have been found in the epigastric & umbilical regions, unaccompanied by any clear or satisfactory symptoms, but when were found on dissection, to depend on organic disease of the stomach. In the case of a large globular tumor below the umbilicus, one might be apt to conclude that, from whatever part it originated, its low position, and the absence of all symptoms which would indicate a disease of the stomach distinctly showed that this viscus was not affected. But again, - we know that the stomach often descends considerably into the pelvis; and that on this account, tumors attached to it, have, from their depending position, been mistaken, not unfrequently, by experienced practitioners too, for other

Diseases. In all the artificial divisions of the abdomen, there is situated

in any one of which, the tumor may be situated; which still further increases the difficulty. If it exists in the center of the abdomen, it may arise from the mesentery, the stomach, &c: if in the hypochondrium, the disease is more obscure and obscure. There is not, in truth, a more difficult part of medical practice, than to distinguish between the various tumors to be met with, daily, in the abdomen; or to obtain anything like conclusive or satisfactory evidence as to their origin and connections.

Cases are of great value in diminishing difficulties in diagnosis.

Dr. Ross, in a recent report on "Tumors of the Abdomen," cites many interesting cases. He

1st Tumors confined to the abdominal cavity.

2nd Tumors depending on disease of the
uterus, ovaries, or vagina.

3rd Tumors arising from alvine concretions.

4th Ovarian Tumors.

It would afford me
great pleasure to write all of these cases
but would be encroaching too much upon
your precious time. They may be found
in the "Medical Chirurgical Review" for
July 1835. periscope; page 254.

Tumors confined to the abdominal
parietes are of not very rare occurrence;
it is not uncommon to find them with
the same case. Some surgical dis-
orders as to their nature have been made.

Several species are distinguished
by the nature of the tumor, the
mode of formation, &c. It is sometimes difficult
to distinguish them from the more common

exist in connection with extensive disease of the omentum.

"Tumors from alvine concretions." These tumors not unfrequently occur, and might be related in which tumors of various & dissimilar kinds, have been mistaken for alvine concretions.

"Ovarian Tumors." In early life the ovaries remain the formation of eggs, at a later period the ovary contains a number of vesicles. When at a later period the ovary enlarges and contains a number of vesicles. The first appearance of disease in the ovary is an enlargement of the ovary, which is usually accompanied by an enlargement of the uterus, but it often happens that the ovary enlarges to a considerable size, and a gelatinous fluid is secreted. In the latter case, the tumor is called a

...the ...
...the ...
...the ...
...the ...
...the ...

Pain being dependent ...
...slight peritoneal inflammation, its
presence or absence is no criterion of
...
tumor.

Having alluded in brief, to
the ... of Abdominal Tumors
... I will now
... as to its treatment.

The following case was furnished me
by Dr. ... of ... I give it in
his own language:

Wm W., aged about
45 years, found himself gradually increas-
ing in size in the central parts of the ab-
domen, unattended with pain or any
marked disturbance of the general health.

She was supposed to consider it an interest
of the children, and to attend
at that various period of life, and for a
long time paid no attention to it until
her size attained that of a woman at the
full time of gestation, when she began to
be troublesome to herself and to suffer
from attacks of functional derangement
of stomach & bowels. About 3 years be-
fore her death she was attacked with
convulsions of the bowels attended with
involuntary evacuations which yielded
to calomel & opium, & other sedatives, and
was followed with some time by the typical
kind which lasted about 3 weeks. Afterward
she had comfortable health, with occasional
attacks of colic, until about 2 months prior
her death, when she was attacked with
vomiting & dark green bilious matters
of the color of a solution of iron sulfate,
which continued from 10 to 14 days with
some tenderness of the abdomen, and was

followed with obstinate thirst which con-
tinued about a week, when she gradually re-
covered. Some time afterwards she was
again attacked with vomiting & dark
green stools, with tenderness of the ab-
domen, with thirst and great irrita-
bility of the stomach which was quite un-
manageable by all the means in my
power. These symptoms gradually
increased for two or three weeks, when the
power of life ^{appeared} began to give way, - a
presage of approaching dissolution.

At this time there was a sensible flac-
citation of fluid in the cavity of the ab-
domen. And the humor began to sub-
side - which finally, previous to death,
subsided to at least a quarter part
of its original size. If she turned upon
her left side, she would immediately
have an accumulation of water in that
side. The humor returning, the patient
was unable to use her faculties until nearly

the last. - This is a most accurate of the most rapid
and natural termination of the tumor in the abdomen,
and may, according to my best information, at
periods of about 10 years. - When I was first con-
sulted on the case, and a week previous to
her death, I found a large tumor filling the
whole abdomen, with a slight fluctuation of
fluid between the layers of the tumor, and
the tumor. The situation of the tumor was
approximately central, and it occupied entire
midline. - Several attempts were made
without effect further than to remove the
abdominal fluid. - Owing to the size of
of the tumor, no other operation was
made, though she had specially request-
ed it. Nevertheless, I will venture to give
an opinion on the nature and origin of the
above described tumor, in absence of actual
examination of it, even to the death. -
It is my opinion it was of the same
nature, and was a collection of lymphatics,
all united in one, and contained within

2. *Colletes* - One of the common bees found in the
and found in the nests of this species. It is a small, stout
beed. It is more common in the nests of the
first race. The nests originate from the same source.



X.

Dissertation
on
Inflammation.

By
Seth Porter Ford,
of Washington,
Candidate for a License



Inflammation

The term inflammation, as long since
used by the ancients to denote that state of parts
which is characterized by the existence of an unusual
degree of heat - pain - redness & swelling
in any of the Organs or textures of which the
human Body is composed - now a good know-
ledge of the nature and course of inflammation - is
of no less importance to the practice of Surgery - than
is a good knowledge of every other medical mat-
ter - It is a disease the effects of which produce
more trouble in the organs and textures of the
Body than every other disease with which we are
acquainted - its effects produced on the Lungs
from slight exposure - commencing in the infe-
rior part - as it often does - extending in a few
hours throughout the entire structure - producing
an entire suspension of the respiratory functions
of the lungs & chest - ending as it does in many
cases - in Resolution - Suppuration - tubercular
excavation - adhesion - Ulcers - and finally with
Fever or Sepsis - depending upon severity of disease

2) Inflammation has been divided into Healthy
or that inflammation which has for its
object the removal of parts which have
been injured to their natural or healthy state
unhealthily, inflammation or that unhealthy
inflammation which has a tendency to the
destruction of those parts in which it does exist
by the process of ^{suppuration} & gangrene & producing
a great degree of constitutional interference such
as fever where in my child - nausea, head
ache - bus quick and at first small - afterwards
full and hard - tongue dry and parched, urine
scanty, and high colored, and light, and burning
of the blood - also can divide into acute and
chronic inflammation - the former is rapid
in its course, and violent both in its local and
symptomatic phenomena - the latter is general
ly though not always the consequence of the
former, characterized by a slow progress and much
less intensity in all its symptoms - In the
serous membranes, chronic inflammation results
either in the effusion of serum giving rise

to a roborating accumulation, or to a general change of structure - such as thickening and induration and frequently to the formation of new matter - The true causes and the various consequences of this variety of inflammation are still unknown - pyrexia and various other local and general affections - Life in the solid organs and glandular structures is indurated, thickened, and other organic changes are its effects -

In the diagnosis and medical treatment the sympathetic phenomena of inflammation constitutes one of the most interesting and important objects of attention in the wide extent of medical science - Among the many febrile affections that are met with in practice, whether acute or chronic - there are comparatively but a very few in which local inflammation does not exist in some organ or structure, and although in the majority of instances - inflammation is a secondary symptom, (developed after the commencement of the disease) - this influence in protracting the disease and aggravating its phenomena is perhaps not the less

4. consequences - whenever fibril irritation becomes more protracted - or chronic in its course, we may infer with little chance of mistake, and there does exist some obscure focus of inflammation in some of the internal parts or organs of the body - now how does this various opinions as to what state the capillaries are in when in a state of inflammation - whatever may be the remote exciting cause of inflammation - it is believed that the following changes are effected in the progress of its action - alteration of the vital properties of the capillaries in the parts in which inflammation does exist - therefore a change in the sensibility and irritability of the capillaries would seem to be essential to the existence of inflammation - or when these vital properties remain in their normal state - a more natural determination of blood into them, does not constitute inflammation - but only congestion or local plethora - It is believed that the action of the capillaries to an increased action of the blood vessels with a spasmodic stricture at their extremities - But all the degenerative series are also

in a state of over distention in an inflamed part, as I
well as the arteries - It is evident that no such abnormal
stricture can exist - for Broussais hypothesis on the nature
of the capillaries in inflammation is that besides
the action of the blood vessels being increased the
resistance to the flow of the blood is diminished and
that instead of an increase of action in the capillaries
of the part - as is maintained by most writers on the
subject - the direct contrary takes place and that
there is a deficiency of action more likely to be
parallaxis of the part instead of spasm - are the
capillaries of an inflamed part in a state of activity
and passive relaxation - and the velocity of the blood
circulating in them, diminished - or are these vessels
in a state of increased action - and the momentum
of the blood within them augmented as is maintained
by Mr. Hunter upon these points there has been
much written both pro and con - and as for my setting
forth any new ideas ^{upon the subject} would be perfectly absurd -
we know that the capillaries are in a state of excitation
and that this excitation may be connected either with
an increased or decreased power of action - and the

1/ and the circulation. Inflammation is imitated by
most of modern authors and usually in the most
thick, looks the most dangerous to be sure —
{by imitating} — the cause of inflammation may
also be divided into chemical and mechanical
causes — Chemical such as excessive heat or cold —
acids and in fact all those articles that produce
an irritation of the part to which they come in
contact with — Mechanical causes such as
wounds of various kinds, contusions, fractures,
Lacerations — Long continued pressure — and the
presence of foreign bodies — whether introduced into
the tissues or generated within the body — Inflammation
of these causes depends upon the degree in which they
are applied and the nature of the part upon which they
act — if applied in a high degree of power, destroying
the vitality of the part upon which they act — it would
be surrounded by a degree of inflammation the severity
of which would depend upon the degree of power — and
peculiar texture of the part and constitution of the
patient — Inflammation sometimes arises from debility
this state is frequently met with in the extremities of

all persons, in which the blood returns from the parts
with difficulty - from weakened power - followed by
inflammation of the vein, frequently attended with
injections, and acute disease - Persons of a feeble
nervous power of body and feeble constitution are
more subject to inflammatory action than are robust
and where such action can take place, it is more com-
mon and extensive - Some are naturally sensitive -
others become so from disease - as in fever and other
diseases when the constitution has suffered much -
some long confinement in one position - parts become
numb and morbid, on the contrary when the
system is healthy and vigorous although the
patient may remain for weeks in the same posi-
tion no such effect will be produced -

Although inflammation is characterized by pain
greatly increased on pressure - increased heat - redness
and swelling yet none of these symptoms are
to be regarded as strictly essential to the existence of
inflammation - and consequently they are only to be
expected in certain forms of inflammation -
Variety indeed seems to be one of the characters of

4 inflammation in general, and the more it is
does not constantly exhibit exactly the same phenomena—
several of its symptoms may, in various or all cases, be
consequence of a particular situation, structure, and
nature of the part affected = the different effects
also resulting from the disturbance of the functions
of various organs = must obviously produce uninter-
mitting diversity in the symptoms = as in the
case of the eye, the swelling, redness, and throbbing, are of course not
manifest to the eye or touch—though the diagnosis
may receive no elucidation from such symptoms—
in the case of the liver, the redness, throbbing, and
the existence of inflammatory fever, the indication of
the cause the particular functions involved or disor-
dered = and from abundance of the secretions = and also a
question of ^{as to} position, what parts are in the most suscep-
tible inflammatory action—parts near the centre of
circulation or remote from the centre = noting the
the language of the blood we say that the indica-
tion, position, structure, function, and distance of
the part affected, from the source of circulation—

Makes great difference in the symptoms & course and
termination of inflammation - but in which the blood
circulates vigorously & in inflammation the rest -
but vital organs through exceedingly vascular and
undergo inflammation & increase - Success in the
Hunter remarks on natural liberation of morbid matter -
before so intimately with their vessels are constituted
condition - a suppurating position has increase in
the extent of the inflammation & more - with the
blood being purified in the veins in it seems to be
lost - The four general symptoms of inflammation
have been ascribed to, redness, swelling, heat & pain - a greater
termination of blood to the part owing to the excited
state of the capillaries - = Increase Heat is so great
as to oppose to us from the surface of the patient rising
up over spreading the heat of the blood at the heart -
Pain greatly increased in measure - though pain is
not always present, as there are cases recorded in which
inflammation of the brain & lungs have terminated
in termination without pain - pain is present
neither is pain to be looked upon as a sure sign of infla-
mation - for we often find cases of Neuritis pain when

I have not the opportunity of illustrating these
 pathological facts by dissections from the body, but
 the following table may help to understand the facts,
 which in this case inflammation being usually aggrava-
 ted by pressure. Inflammation is attended by great
 variety of pain, mostly on the nature of the structure
 inflamed - as instance in the various membranes,
 in the osseous, or stringy, kind - in the cellular tissue
 throbbing, pain - in the nerves, shooting or paralytic
 lameness, pain - in the cutaneous inflammation
 is attended with a burning sensation - in mucous
 inflammation with itching, or burning pain.
 It is interesting to observe how quick an irritation
 from the natural state of part excite pain - it may
 arise from the various conditions in which members
 of the part are placed - pain with various degrees of sen-
 sibility of the part, or in the course of life, and by
 other circumstances connected with it - as when
 notably in cases of the action of acids on the
 part either of food or drink - according as the acid is more
 or less abundant, producing different effects in the variety
 of tissue, more acrid in the soft than in the harder

Inflammation is said to have four terminations—
of which resolution is the only way in which inflammation
can terminate when it declines and disappears without
having produced any structural lesion, or perceptible
discharge—it consists in a gradual return of the vital prop-
ties of the inflamed part to their natural condition, and a
consequent resumption of the capillaries to their ordi-
nary, or healthy action—where either some portion of the
affected part is destroyed, some total loss of vitality—or
new secretions are formed by the morbid action of the vessels
(cicatrix)—frequently the termination of inflammation
by resolution is accompanied by an increase of the natural
secretion of the whole organ—as noticed in the mucous
membranes by an increase of mucus which is announced
to be a favourable termination of inflammation—

Resolution is by far the most desirable way in which
inflammation can terminate—and in cases of
acute inflammatory action, our greatest object in view
should be to bring about this termination as it will
save the patient a great deal of pain and inconvenience,
which would be occasioned by the formation of abscess
—the process of which would a long time be

the parts concerned, and take place - In the progress
of inflammation, in various parts of the body, there
is a great effusion - the effusion of blood is most
common, and the effusion of lymph is not
uncommon. The effusion of lymph is most
common in the effusion of blood, and the
effusion of blood is more common in the
effusion of lymph. Thus such effusions taking place in the progress
of inflammation, from serous membranes - often
cause a great union and cause firm adhesions
between them to take place when considered to act
thence - to this action we would attribute the cause
of the vesicles and numerous others of the same
kind, so frequently found united in cases of thoracic
inflammation. When in the mucous membranes
such adhesions never take place from inflammation
- without this necessity, we would not naturally
behold to adhesions between them. In the various
parts of the body, as well as those of the serous membranes, and
the respiratory passages - as these parts are more
frequently affected by inflammation than any
other parts of which the human body is composed -
when effusion takes place in the substance of the parts

vidance - or into the cavity of the cellular tissue, it
causes consolidation of these parts, rendering induration =
the Arterial and Lymphatic glands are liable to
these consequences - and the effects produced by inflammation.
Proceeding - still further the point of suppuration takes
place - which consists in a secretion of pus, this is composed
of particles similar to those of the blood only differing in
colour - of all the animal tissues the mucous and cellular
are most liable to this mode of termination = When not
withstanding the foregoing treatment, the sores continue
in to produce Resolution = the inflammation becomes
attended with more severe pain, much harder termina-
tion, and a conical prominence in the centre, suppuration
will take place - Sometimes this event may, from the
first be prognosticated - because there are inflammations
which, from their peculiar nature terminate in suppu-
ration, the Boil is an instance of this kind, and
according to several authors - the inflammation
produced by fever = When the patient is seized with
shiverings when the fever and all the symptoms
of inflammation suddenly diminish with the ap-
pearance of a heavy, but cold, and moist sweat, acute resis-

7 In the infant state - the cerebral vessels the tumour
which softens and swells, and the vessels which are
increased - and the tumour of the tumour - then all may
now the matter is done, a Surgeon inclined with
great nicety of touch, will often feel the pulsation
of matter before the presence of it is evident
(exclusion). Though it may be seen, and
you may see the effect of the tumour - the
pulsation of the matter - but the pulsation of the
arteries are not increased and there is no
swelling, is perhaps the blood coagulating in some
and gangrene of the part is produced - the occurrence of
gangrene is attended with a sudden cessation of pain -
sinking of the pulse - cold extremities - cold sweat -
indistinctness of vision - slight delirium - and a universal
effusion of the countenance - and all are passing
gangrene, will be seen to vary, according, to the severity
which it is produced - all this in part, thus effected if
the vessel is not to rupture in its progress, some arteries
nerves and nerves after are compression of a part of their
power, and existing in a certain degree the tendency
to gangrene in it may seem to be a partial, but

10) not a total obstruction of the skin, the blood, however, circulates through some of the capillary vessels - and the nerves, too, a portion of their sensibility - But the language of pain, tongue is a mortification which chiefly speaking is not actually, tissue not coming being the inflammation due to the skin - inflammation and the very depth of the cutis - The symptoms of gangrene differ according to the manner in which it is caused - when it is the result of high action and active inflammation - the skin is exceedingly severe the inflammation is very extensive with a white on the skin, and generally attended with more or less of sloughing - the vesication and the large and the actual in the skin, pale at first, but afterwards assuming a brownish tinge - the cuticle is raised and vesication is formed - the skin to contain a bloody serum - when this is done the skin assumes the gangrenous appearance, and becomes perfectly insensible - the vesication extending to rest beyond the ulceration, the skin shrivels away, and the gangrenous vesications extending, no more the actual surface - The constitution is more or less changed - a high degree of putrid fever, pulse often quick

is small and thready, and generally, intermittent in
-ness, it is a sign of gangrene, and it takes place through
the skin in particular, from the stomach, as in the case
for example - which was a very troublesome symptom
in a case which came under my observation the summer
last, which was a case of the toxic, extending throughout
the whole foot and limb, ending in death - the facts
that when gangrene arises from a diseased state of the
constitution, the stomach is in a much debilitated
its arrangement is followed by a general contraction of
the diaphragm producing asphyxia, and a general
-thetic action, now death - the result, as gangrene
to be an excessive action of the parts, kills the blood vessels
and the blood which is contained in the dead vessels becomes
coagulated, and the parts which they contain never
with vitality is lost, and the circulation can never
return to the parts - thus depriving them of their normal
action and life -

Treatment of Inflammation
which is either constitutional, local or both
combined - When any inflammation appears directly
in force, as its action, it is more or less

17 of the influence of an injury, when the constitution is
the treatment must necessarily be different in
no vital organ can be (permanently) in its functions without
producing a general disturbance in the system, and
this will be greater or less in proportion to the importance
of the part injured - the extent of the injury, and
the nature of the persons constitution ==

The most powerful constitutional and topical means
of relieving inflammatory action and the ones to be
first resorted to is bleeding - to remove the
principally, and to remove the inflammation
of vessels now - and that it will be more in the
Syncope which it occasions Mr. C. Cooper - we know that
sometimes the removal of a very small quantity of
blood will occasion not only a suspension of all the
functions, but of the motion of the heart - and this
will lessen the momentum of the circulation, and when
there is great distention of the blood vessels, the
circulation will be more in water, and consequently
the solid fluid will be thrown with greater force
not only on the injured part, but on all the organs
of the body - the indication for general bleeding

14 is a hard puls in this state of puls the diameter of
the vessel appears to be diminished yet its action is strong.
and such a condition is like the condition of a wire being
this to be the state of the puls - should we persist in
taking away blood a quickness of puls is not in itself
a sufficient proof that bleeding is require - therefore we
will not bleed when there is a quick puls. and at
the same time it is hard a quick puls is in itself
a proof of vitality which means that bleeding will
increase - is bleeding not a local stimulus in governing
the puls of blood - when general bleeding is requir-
ed the quantity must depend upon the weight and
education of the organ affected, the severity and urgency
of the inflammation, the length and age of the patient -
the state of the puls and appearance of the blood &c.
The manner in which blood is to be taken for the relief
of inflammation - it should be abstracted as rapidly as
possible - therefore the cup should be of considerable size
so that the instrument may see the immediate effects
on the immediate volume of circulating blood - producing
a general constriction of the vessels of the organ - and even
to uniting and in some instances produce more to effect

which blood must be suddenly drawn. - The local bleeding is also of use in many times very beneficial and more bleeding is in, such as - the nearer the cause of bleeding is to the seat of inflammation the more efficacious is the evacuation - and the less the reaction or taking away, even a quantity as small as shown by a serious weakness of the whole constitution - local bleeding usually, however, produces a stimulus when general efforts have been resorted to. - Dr. Thomson remarks whenever any doubt arises with regard to the propriety of venesection, it may be said even more common rule, that it is safer to employ, local than general bleeding. - In cases of severe inflammation the alimentary canal becomes at first inactive - and the secretions become diminished or entirely cease - producing a continuance of constitutional irritation - to excite the action of the intestinal canal, and to restore its action is, therefore one of our highest objects - this may be done with leeches & a cathartic or a slip in nearly the same manner as the abstraction of blood from the arm - on a list of cases will be given with the cases - after taking a brisk cathartic in a case of

20 Purgatives have another good influence by carrying
off what our humors contain which if
which if suffered to remain would produce much
irritation. Another mode in which purgatives produce
a beneficial effect in inflammation is by irritating
the intestines. Blood is determined to these and is
abstracted from the part inflamed. When the theory
that the increased action excited with cathartics
in the body, at the same time the action
of Cathartics with the mercurial or good acting more on
the Liver exciting healthy secretion of Bile - Dr Cooper
recommends Calomel grs Cathartic extract grs. or grs. 4
with 3 ext - Castor Oil also - Inf of Linum Sulf. Magnesia -
almost all of the saline refrigerant cathartics in some
cases antimony is recommended in reuniting cases -
Calomel in full dose is looked on good in many cases
of inflammation - in cases of chronic inflammation blisters
are counter-irritants - sometimes after a blister has been used
and it may be necessary to keep up the discharge and
irritation - this can be done with the same ointment -
another mode and depends the action on local irritation
but cast is combined with oil as having generally adopted

These applications which are recommended are a matter
is one of the rest - being always at hand in case of application
and even in nature more grateful is the remedy of its nature
than the application of cold water - applied with cloths wet
and changed often - inflammation of the brain the application
of ice to the head and warmth to the feet - in some cases cold
increases the pain where this is the effect warmth and
moisture should be applied - emetics are also of
importance - also purgatives the kind is of little importance
The position is of the utmost importance in the treatment
of inflammation the patient on the limbs should be elevated
to a point higher than the axis of the body thus facilitating
the action of the heart - however at instance - a patient
in a recumbent position should be on back - to ensure
this have access to light and fresh air - as to room
a high position of the head is necessary - great attention
to diet that should be as to diet including, since
all animal food should be avoided and diet a diet of
vegetables treatment in every respect should be uniform
upon the patient a plan on which as regards diet
and the attending Surgeon will take care in the remainder
of the treatment - Heth, Peter, Ford New Haven Jan 20-7

XI.

Dissertation
on
Typhous Fever.

By
Isaac Shafer Hunt,
of Newark, New Jersey,
Candidate for the Degree of Doctor in Medicine.



Typhous Fever

A favorite arrangement of fevers among writers, from Cullen down to Good, contemplated three classes - the *Synocha*, as purely inflammatory - *Typhus* or purely nervous - and *synochus*, a compound of the characteristic of the two. According to the views formally advocated, we might regard all fevers as of this mixed or *synochus* form.

Causes. Typhus may arise from any of the causes which produce direct debility, or from abstraction of accustomed stimuli - bad innutritious scanty food - cold or fatigue long continued - deprivation of fresh pure air. These circumstances depress the energies of the sensorial system, and the symptoms of such depression are prominent. It is the famine fever of the Irish - prevails among the poor population of our northern cities to some extent, and in camps, jails, gale ships and hospitals. It occurs among the negro population at the south, from the filth of their houses, and a removal to a new hut is found both remedial and prophylactic. Typhous fever is contagious - it is also of epidemic dissemination

It has been variously divided and subdivided. The old English writers distinguish Typhus Mitis or nervous fever, from Typhus Gravior or Putrid fever.

The more recent speak of Simple, Inflammatory and congestive Typhus, as more grades, characterized by difference of intensity and affecting in their progress different parts of the body in different modes.

The french recognize many varieties, the simple, Adynamic, Atanic, Putrid &c

An essential distinction is, by some writers maintained to exist between "Typhus proper" or "true Typhus" and "Typhoid fevers".

Typhus Mitis - vulgo, Nervous fever, usually occurs sporadically, comes on slowly and very gradually; anorexia, with furred tongue, and unpleasant taste in the mouth precedes - there is chilliness, weakness, and languor - depression of spirits - oppression at præcordia, and sighing. The pulse is frequent, small and weak, the skin becomes hot and dry - there is headache, vertigo or light delirium. The duration of these mild cases is uncertain and may be measured septenary periods.

For the first and second weeks the bowels will probably be torpid and inactive; in the third, they begin to be disturbed and irritable, with diarrhea, often of mucus. The stools are small, dark and offensive. The eruption, which has been regarded as characteristic, comes out in the second week, about the ninth day.

It consists of minute rose-red spots, circular, very little elevated, disappearing on pressure. Their duration is very uncertain. A very different cutaneous effusion is often met with. Minute hemispherical vesicles, called sudamina, are found on the sides of the neck, in the groin and arm-pits. They are filled with a transparent fluid, and are more easily felt than seen.

Still later, and in the more unpromising cases petechiae appear. These are easily distinguished by the central red spot, caused by extravasation, which cannot be obliterated by pressure. When the patient is to recover, the symptoms above enumerated subside generally; the skin is soft, the tongue pale and moist, and he sleeps calmly and refreshingly.

(As a patient I saw at the hospital,) the muscular limbs
is becoming great; with tremors or subsultus tremens,
the pulse rapid, tongue dry, is of a deep red hue, and
chapped or cracked - teeth and lips covered with a dark,
tenacious sordes - gloom and anxiety, when muttering
delirium supervenes, with picking the bed clothes,
and catching imaginary objects in the air; coma or
brief convulsions precedes death.

Prognosis generally favorable in this form of Typhus.

Typhus Gravior - vulgo, Putrid Fever - scarcely ever sporadic
spread rapidly by contagion or epidemic influence.
Commences with alternations of heat and cold, succeeded
it by a pungently hot, harsh and dry skin.

The countenance expressive of anxiety and distress;
the face turgid, with a dark red flush; eyes heavy and
red, headache severe, mind disturbed and dejected;
pulse hard, tense, small, frequent, and irregular;
tongue covered with a thick brownish or yellow
fur; gastric oppression great, with nausea and retching;
voices torpid. In a short time, three or four days, tongue
becomes dark, red, clean, smooth, dry, cracked - mouth and
teeth incrustated with sordes - pulse sinks, is feeble and very rapid

Syncope on moving - subcultur tendinum - hurried respiration, with sighing and sobing, or coma with slow and laborious breathing; breath fetid; petechiae and vibices, hemorrhages of 'black' blood - death from the fifth to the thirtieth day.

Prognosis in Typhus Gravior doubtful.

The symptoms which betoken increased sensoria and vascular prostration are unfavorable, as stupor and insensibility to external impressions and irritations.

Meteorism is not only a gloomy symptom, but a dangerous condition. "But the most ill-boding of all the bad symptoms are; blindness; involuntary flow of tears; difficult deglutition; paralysis of the tongue; continued low muttering delirium; a very frequent, small and irregular pulse; petechia; distortion of the muscles of the face; continued motion of the hands, and picking at flocks; dysenteric stools; colligative hemorrhages &c (Hildebrand)

The favorable symptoms are various; such as moderate deafness, the pulse rising; becoming slower, softer and stronger, the breathing easier and

calmer, with a natural tongue, sediment in the urine; the breaking out of sweat, natural state of the skin, the pulse rising after stimulants, with the abatement of sleep &c.

Treatment In the milder cases it will suffice to empty the stomach with an emetic, followed by a purgative. The best is the combination of calomel and rhubarb, persisted in to a moderate extent for a few days. Diaphoretics may be given in the mean time, assisted by the warm or vapor bath.

When the disease is forming, the principle indication is to overcome the torpor of the extreme vessels of the surface, and to bring back the circulation from the internal to the external parts.

For this purpose, we give an emetic, as the most efficient and beneficial means we possess.

We have been taught, indeed, that in many instances the early administration of an emetic will interrupt the train of morbid actions, and prevent the further development of disease.

If the disease is obstinate, and the strength of the patient threatens to yield, we resort to calomel

in proper doses as alterative, while stimulants are employed freely internally.

Wine unmixed or Brandy and water, or Port may be chosen if the bowels are loose. Synapisms and vesicatories may be applied, and in such succession, that the patient must be continually under their influence. If there is much abdominal irritation, mercurials will not be well borne, unless combined with opium. If the opium be contra-indicated, we may prescribe with advantage the acet. plumbi in small doses. Here too, the nitrate of silver is used with good effect. It disposes the mucous ulcers to heal, and seems to relieve Sympneitis.

In the management of cases of Typhus gravior, our task is a delicate and difficult one.

Our urgent indications are, to relieve morbid excitement and undue determination to vital organs, with the least delay, and the least subtraction from the vis vitæ.

Venesection seems so obviously forbidden by the great apparent debility, that it requires considerable courage to resort to it.

Moderate bleeding will sometimes be well borne and do service in young subjects of good constitution, with tense pulse and vehement local determination.

The topical detraction of blood is, generally to be preferred. When the pulse is active, quick, and strong, or full and considerably resisting, as is sometimes the case, blood ought unquestionably to be drawn. The cold bath will be useful if the skin is hot and dry. If cool and constricted, the hot bath should be substituted.

Cold affusions often procure great relief, and sometimes give a speedy tendency to convalescence, when employed whilst the skin is hot and dry and arterial excitement considerable.

Armstrong says "cold affusions are rarely beneficial after the fourth day of the stage of excitement; after this period, tepid affusions, of the temperature of about 75° ought to be used."

Marshall Hall says "the heat of the surface is to be moderated by cold and tepid sponging, a solution of chloride of soda being preferable to pure water."

An emetic is next serviceable; if it do not move the bowels sufficiently, it may be aided by stimulating enemata; or if the strength allow it a cathartic. The mercurial treatment should not be omitted, as it affords our best hope of safety.

Dr James Hamilton says; "A gentle ptygalism is of the utmost consequence in Typhus, as well as the remittent forms, particularly in the south; it relieves at once, and immediately on its taking place".

In the meantime, stimulant diaphoretics should be freely employed, as camphor, the volatile alkali; aided by wine whey and infusion of serpentaria.

Opium was formerly a good deal employed in the advanced stage of this disease, but is considered by some, a doubtful remedy. I see no very good reason for the avoidance of opium, if indicated, as it often is, by intestinal pain and spasm, and diarrhea.

Sydenham speaks favourably of its powers, and Cullen thought it valuable for allaying the low delirium in the collapse of the disease.

Synapism may be applied extensively and frequently; but vesicatoris, although they are often beneficial, yet embarrass us occasionally by sloughing, especially in the latter stages of protracted cases.

Wine is infinitely our best and safest stimulant, and should be given unmixed; it is important that the patient should take it in abundance.

When wine seems to fail of its stimulating influence, and the patient still sinks, we may resort to the administration of ardent spirits. In cases which still seem tending to a hopeless stage of prostration, we may resort to the tincture of cantharides, phosphorus, and turpentine, which, though not the safest, are among the most active stimulants.

"The mineral acids constitute agreeable drinks."

In tedious cases, the part pressed on as the patient lies in bed, must be relieved, by all the arrangements employed in cases of fracture - The point of pressure must be changed and often gently rubbed.

The body and clothes and apartment of the sick, should be kept scrupulously clean, and the latter well ventilated.

Isaac Shafer Hunt.

~~XII.~~

Dissertation
on
Traumatic Hysteria.

By
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Candidate for the Degree of Doctor in Medicine.



Traumatic Hysteria is an affection of the nervous system, of considerable severity while it lasts & derives a special importance from its strong resemblance to Tetanus for which it is liable to be mistaken. It usually occurs in persons of a delicate constitution, at rather an early period of life — from twenty to thirty years of age — & is found more frequently than males.

This disease as its name implies arises from wounds, & generally slight punctured wounds of the extremities; although it may like Tetanus follow a wound in any part of the body. It is not immediately apparent but comes on within some six or seven days from the time of the

injury, & usually about the third or fourth. The approach of the disease is marked by a spasmodic action of the muscles in the neighborhood of the wound. This soon extends to the surrounding parts till all or nearly all the muscles of voluntary motion are affected. The spasmodic action consists in a tonic contraction of the muscles, accompanied by clonic spasms, which occur in paroxysms, varying in frequency from ten or fifteen minutes to an hour. The muscles of the back are brought into strong action, so as to overcome those on the anterior part of the body, causing what is called opisthotonus, or as is sometimes the case though rarely, the muscles of the posterior part of the body are overcome by their antagonists, causing emprosthotonus, or still more rarely pleurothotonus by deflection of the body to either side.

The muscles of the jaws are also affected producing trismus. The pulse is generally full & rather rapid. The respiration is hurried & the saliva is jetted from the mouth with a hissing noise. The skin is often hot & the face flushed. A slight delirium is usually present which increases with the clonic spasms and as these subside the mind returns to its former condition.

The prognosis in this disease is favorable - the patient rarely experiencing any permanent injury either in mind or body.

Treatment. - In the treatment of this disease local applications are of great importance. Active irritants are generally the best. Of these the Nit. of Silver, Corrosive Sublimate or Tart. Emetic may be applied to the wound & the neighboring parts. Sometimes other applications than these will be found more useful, such as

oil of Turpentine, Tinct of Cantharides, Mustard cataplasms or the Iodine ointment. These are said to have been successfully employed. So also irritants may be applied to the whole skin, or extensively to that side of the body on which the wound is situated, with great advantage.

During the intervals of the spasms the administration of internal remedies is important. There is almost always constipation which will be obstinate if not overcome early. For abating this cathartics should be given, & Calomel is probably among the best, followed in a short time by Castor Oil or some of the Neutral Salts.

Levasection is sometimes necessary where the pulse is full & strong.

The Narcotics should also be given, and of this class of remedies Opium is decidedly the most useful; it will frequently give relief if employed freely, in doses of

three or four grains. Stramonium has also been used with advantage.

Tobacco is a valuable remedy in this disease, & is to be administered in the form of enema. When given, as it should be, in quantities sufficient to produce the specific effects of the article—violent purging & vomiting, with great prostration, languid pulse, cold extremities &c. it will frequently remove the disease almost immediately.

Points of difference between this disease & Traumatic Tetanus. The importance of the nervous system to life health and comfort, renders all the phenomena attending its derangement, either in function or structure, objects of the utmost interest to the physician, & often require in their diagnosis & treatment all the judgment and skill of which he is master. It has already been intimated that the disorder in question bears a striking res-

resemblance to Traumatic Tetanus - a disease of singular severity, of a dangerous character & almost always fatal... notwithstanding there are differences sufficiently obvious to the careful practitioner & by which he ought to be able at once to distinguish the one from the other.

They differ in the period of attack. Traumatic Hysteria coming on some time during the first six days after the injury, while Traumatic Tetanus rarely shows itself before the seventh, & more commonly not until the eighth, ninth or tenth day.

They differ in the muscles primarily attacked by spasm. In Hysteria these are in the immediate neighborhood of the wound & extending thence to the muscles of the body & throat. In Tetanus those of the jaws & throat - those concerned in mastication & deglutition, are first affected.

They differ in the degree of the tonic & clonic spasms. The parts affected

by the tonic spasm in Dramatic Hysteria can generally be moved somewhat. In *T. Tetanus* they are so firm that no force which it is proper to employ will move them at all. The clonic spasms in the latter consist of a succession of short sharp jerking motions, while in the former the motions are larger - the patient throwing himself about the bed as in pure Hysteria.

T. Hysteria more frequently occurs in delicate persons & in females often than in males. *Tetanus* in vigorous, robust persons, at the most healthy period of their lives, & by far more commonly in males than females.

In *Tetanus* the intellect is perfectly clear & unimpaired, whereas there is always more or less delirium in *T. Hysteria*.

In *T. Hysteria* the teeth are altogether more firmly closed than in

Tetanus. In the latter disease the teeth are not so firmly set together that they cannot be separated a short distance without difficulty.

It ought perhaps to be remarked that occasionally there may be some difficulty in diagnosis, when the wound has been inflicted in the mouth or on some part near the jaws. In this case the muscles first affected will of course be those of the throat and neck as in Tetanus; but the character & degree of the spasms, together with other circumstances above mentioned will render the diagnosis plain.

So also it occasionally happens that *E. Tetanus* comes on earlier than the seventh day, & *E. Hysteria* has been known to make its attack as late as the seventh; but these cases are so rare that they can only be considered as exceptions, & there are fortunately other symptoms

quite sufficient for the discriminating physician.

Having thus attempted to furnish a treatise on Traumatic Hysteria and endeavored, though in a brief & imperfect manner, to give some description of a distressing malady, it is to be regretted that ~~not~~ to a total deficiency of personal observation, the absence of adequate information from the books has not furnished scope & supplied the ability for a more complete & satisfactory paper.

New Haven Ct.

Graham Lee.

July. 1847



XIII,

Dissertation
on
Aneurism.

By
Frederick Oscar Leffingwell,
of New Haven,
Candidate for the Degree of Doctor in Medicine.



Aneurism

Aneurismal tumours are formed by a preternatural dilatation of a part of an artery.

Aneurisms are usually represented as appearing under two forms: the true, or encysted, and the diffused or false.

True, aneurismal tumours, first appear, small and pulsating, and are accidentally discovered by the patient. They disappear on pressure, and can be distinguished from other tumours, by their re-appearance immediately, as the pressure is removed. At their commencement they are unattended with pain, nor are the adjacent parts discoloured, they steadily continue to increase in size



till finally, Their large size, may
so stretch some sensitive nerve, as
to cause exquisite pain, and by
pressure on arteries, and veins, occa-
sion discolouration, coldness, and
edema. These tumours like most
others: advance towards the surface,
destroying by absorption, all the tissues
in their path; as in aneurism of the
Aorta; this tumour appears through
the ribs, which have been removed
by this process. As the tumour
advances in size, the pulsations
become weaker, and weaker, till
at length, they cannot be distin-
guished; This, may be caused by a
deposition of lamellated coagulum
on the ^{tumour} surface of the sac, so thick-
ening its coats that the pulsations of
the artery will not be conveyed to the
tumour, If such a case presented,
there would be great difficulty.



in ascertaining the character of the tumour, was it not from the history of it. The patient, or friends, will remember the time, when it was, a pulsating tumour. "In aneurism of the aorta there are oftentimes, violent neuralgic pains, palpitation, dyspnea, cough, sense of constriction of the chest; unnatural flatness on percussion of the upper part of the chest; loud rough and abrupt bellows murmur above the clavicles upon auscultation; loss of power, numbness of one arm, and weakness or total absence of pulsation at the corresponding wrist; with frequently exhalant respiration, croaking voice, difficulty of deglutition, and edema or dropsy of the serous cavities, from compression of the trachea, esophagus or blood vessels; and sometimes absorption of the ribs from pressure", (Ludlow)



False, or ~~supposed~~, aneurismal tumour.
arises from a wound, or puncture, made
in an artery, which after being properly
dressed, and proper means taken to ~~re-~~
press hemorrhage, by pressure: but
the dressing being removed too soon,
the freshly united artery, is ruptured
from slight cause, thereby causing
effusion of blood into the cellular
substance, forming an aneurismal
tumour. The blood is slowly effused
into the cellular substance, and there
coagulating, forms a sac, which
prevents more blood infiltrating
into the adjacent parts. The tum-
our, as, in true aneurism, is at first
small and pulsating, and continually
increases in size, is temporarily re-
moved by pressure. The differences,
between true, and false aneurisms,
are, that in the true, the tumour



readily yield to pressure and quickly returns on its removal while the false one yields very gradually and returns in like manner and as it contains a lamellated coagula it cannot be reduced in size as much as a true aneurismal tumour the pulsations are also more feeble, and as the tumour advances in bulk are sooner lost



Causes of aneurismal tumours are very difficult oftentimes to ascertain. Among the predisposing causes may be placed the large size of some of the arteries, those more frequently affected perhaps are the aorta and its large branches, these blood vessels have their coats thinner in proportion than those of a smaller size. Perhaps the curvatures of the arteries may, by causing more internal pressure than elsewhere occasion a rupture of the inner coat, or a dilatation of the whole circumference. give rise to an aneurismal tumour. This would happen more particularly in old persons in whom the arterial system is weak, between thirty and sixty years of age, say Mr Cooper when exercise is constant and strength



on the decline. Also may be the result of disease whereby the coats of the artery become altered in its general character and more particularly thinner in its texture. This state of the coats extend a long distance in the course of an artery. Abuse of spirituous liquors, fits of anger, violent exertion of any sort, more frequent in males than females perhaps from the latter cause, muscular exertion, again aneurism, are caused by wounds. Richerand says that in France the men who clean out dissecting rooms, and procure dead bodies for anatomists, almost all die with aneurismal diseases. And he further remarks that he never knew any of these persons who were not addicted to intemperance, and the debility consequent to the



intemperance and disgusting employment, may make them more liable to such diseases than most others —

Treatment

Pressure has sometimes produced ^{changes} leading to a cure of the disease, but care must be taken lest a degree of pain is caused which renders the bandages or whatever other method is used; insupportable by the patient. An advantageous way of applying pressure is by a clamp encircling the limb if the tumour is so situated, with a thumb screw attached, so that an amount of pressure may be applied, which will not occasion serious inconvenience. If pressure is continued the blood is prevented circulating through the tumour as freely as otherwise, and thus

the blood is coagulated, consequently, a cure. The surest means of curing an aneurism, is, by a ligature, and here cautions are to be taken not to place the

ligature near to the tumour as probably the artery is diseased for some distance from the tumour, and if the ligature was placed here, the coats of the artery would not unite, and there would be secondary

hemorrhage, perhaps fatal. Again a ligature near the bifurcation of arteries, might not unite by first intention, as the throbbing of the neighbouring artery, would cause so much motion as to prevent coagulation; and thereby secondary hemorrhage; this would not always happen. It has been said that a current of electricity passed through an aneurismal tumour has effected a cure.

XIV.

Dissertation
on
Parturition.

By
Samuel Esquire Maynard,
of Norwich,
Candidate for the Degree of Doctor in Medicine.

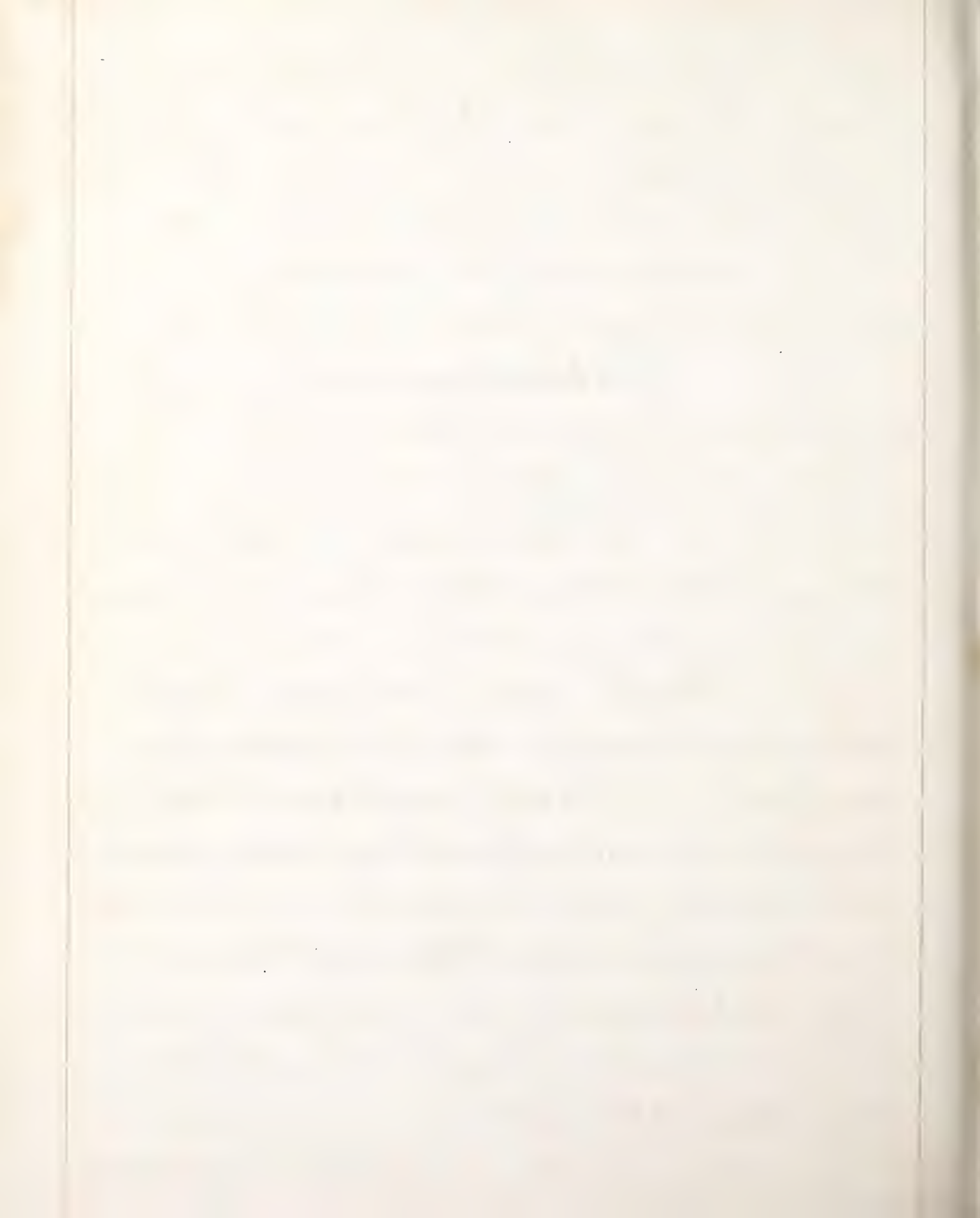


Parturition.

The duration of pregnancy is usually two hundred and seventy days, or nine solar months.

At the end of that time, the uterus takes on an action to expel its contents. This period constitutes what is technically called labor, characterized by peculiar phenomena; the most important of these are, pain, dilatation of the neck of the uterus, discharge of a glairy mucus, frequent desire to pass urine, slight diarrhoea, and rigors.

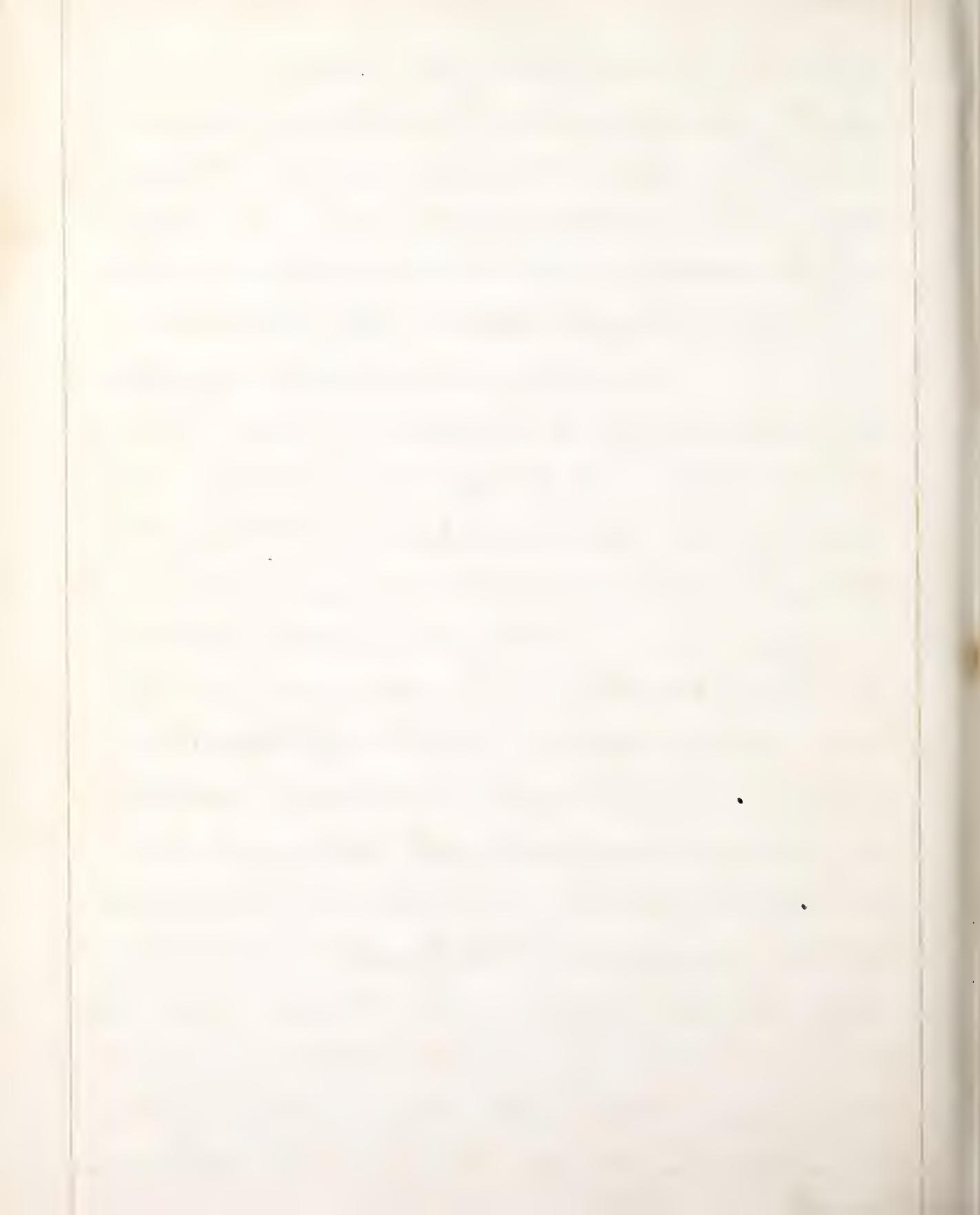
At that time



the woman should be placed in a proper position for labor; that is, upon her left side near the foot of the bed, which should be sufficiently guarded, to protect it from the discharges; with her legs flexed toward the abdomen.

The accoucheur being present, he should try to ascertain about the state of the os tinct; this is done by making an examination. When doing this, he should conduct himself in such a manner, as not to wound the delicacy of his patient. The woman should not be exposed. If the patient be young, especially with her first child, he should communicate through the third person, her mother, if present; or any competent lady, and state to her the necessity for so doing.

The finger is then to be well lubricated with oil, and passed up the vagina, to the neck of the uterus.



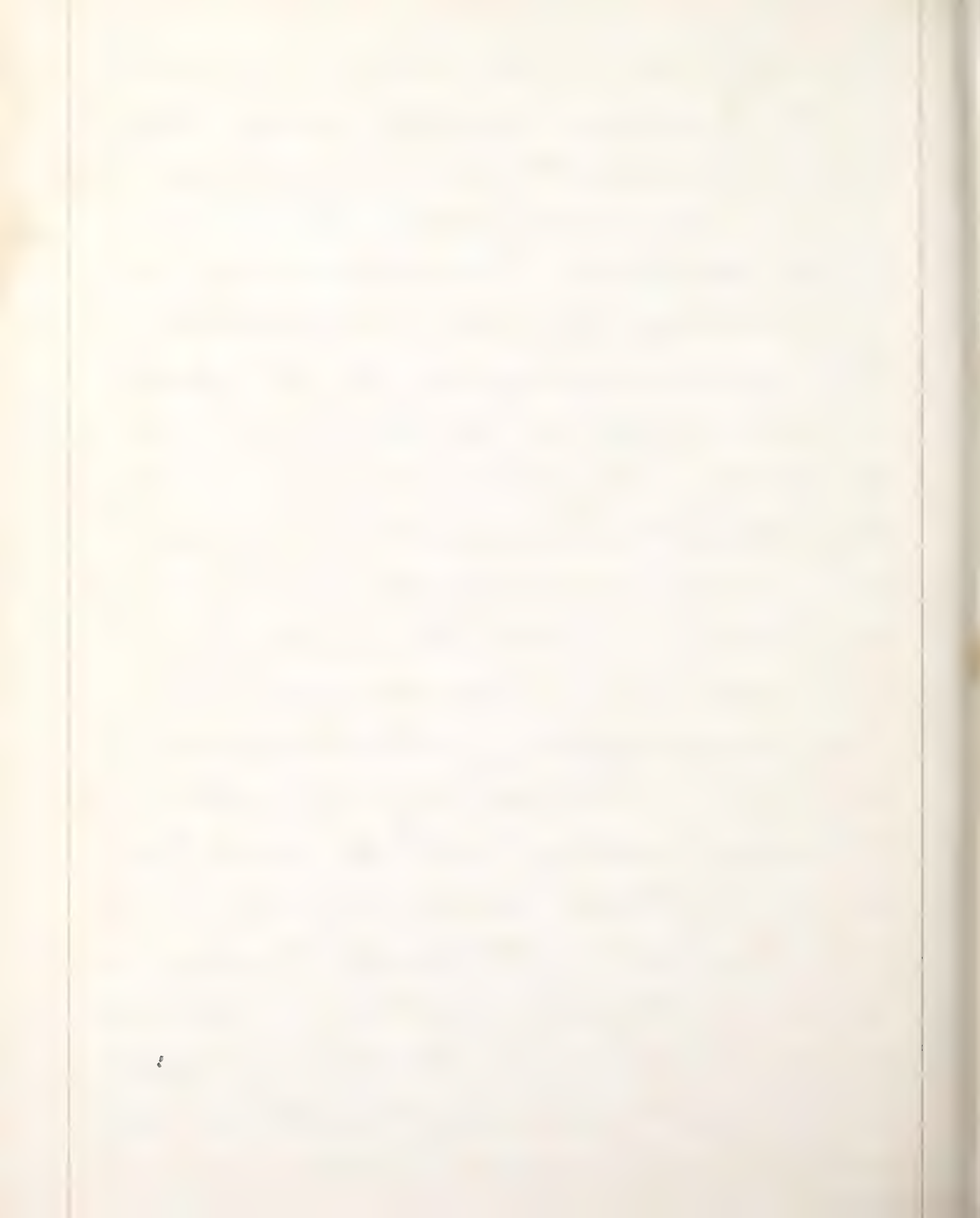
If he find the os tince rigid, little is to be done; if dilated, or easily dilatate, he is to expect the child soon to descend; if not, he should attend to the cause of the delay. The causes are various,

such as a malposition of the child; or the membranes may be too strong; also inertia of the uterus; tumours of various kinds &c.

When he finds the os tince dilated, or easily dilatate, with the membranes protruding, they should be ruptured. When the os tince is in this state, they have done all that they can do, and ought always to be broken. They can be ruptured with the finger nail, or with the point of a pin.

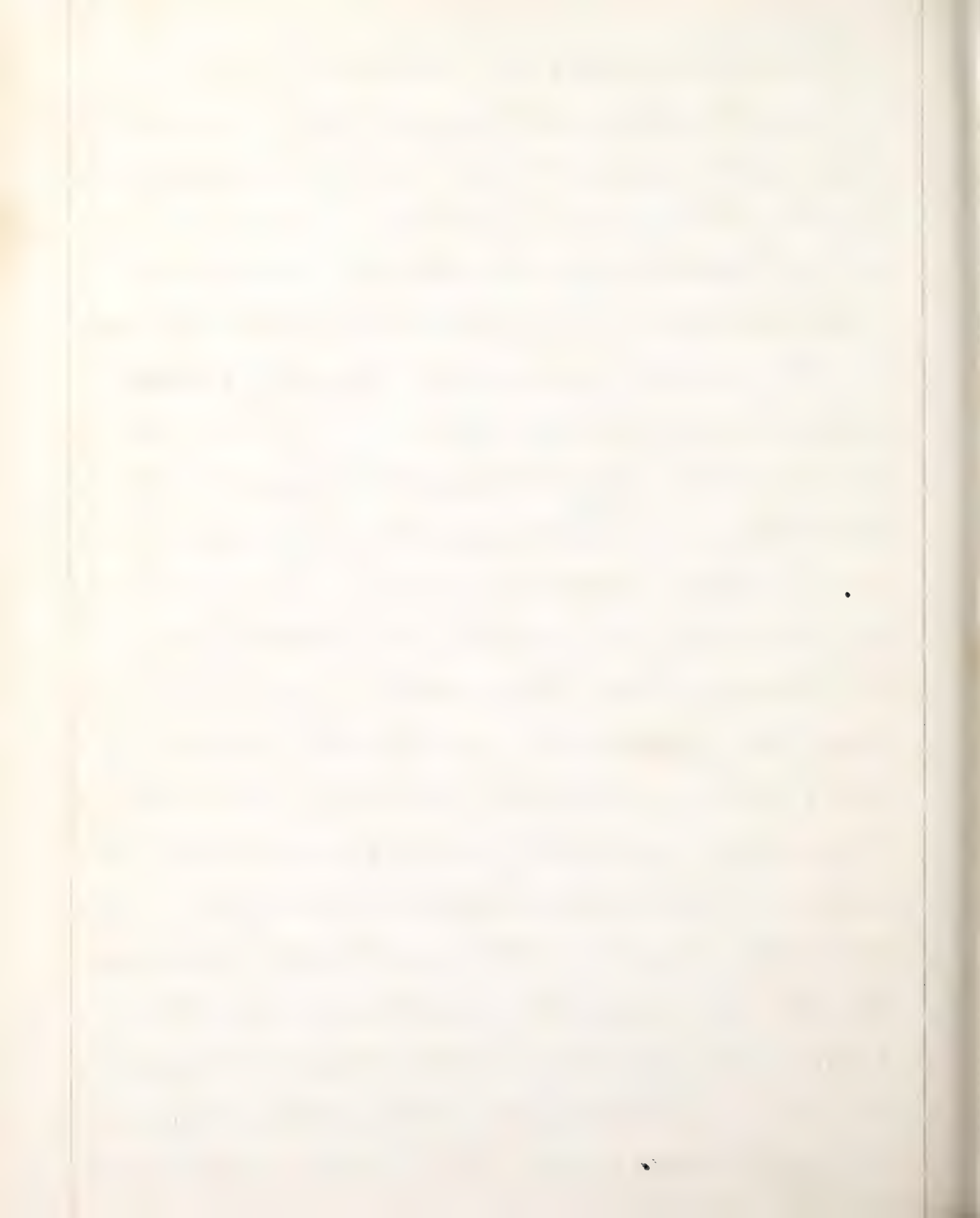
Until they are broken, and the liquor amnii discharged, the accoucheur can not determine what the position of the child is.

Almost any part of the child may present, such as the feet, hands, knees, and breech.



But, ordinarily, he finds the head presenting; and it ought to be, with the long diameter of the head, corresponding with that of the pelvis.

If otherwise, he should rectify the malposition by appropriate treatment, as he should the other malpositions, whatever they may be. When this is done, the head usually begins to descend. During its progress, there is a rotary motion of the head, which causes the face of the child, to look to the anus of the mother, when the head is expelled. At this stage of labor, the accoucheur should not use too much force, to favor the exit of the body. While the occiput is coming from under the arch of the pubis, the perineum should be supported with the palm of the hand, to prevent laceration. The pains will ordinarily be sufficient, when the head is protruded

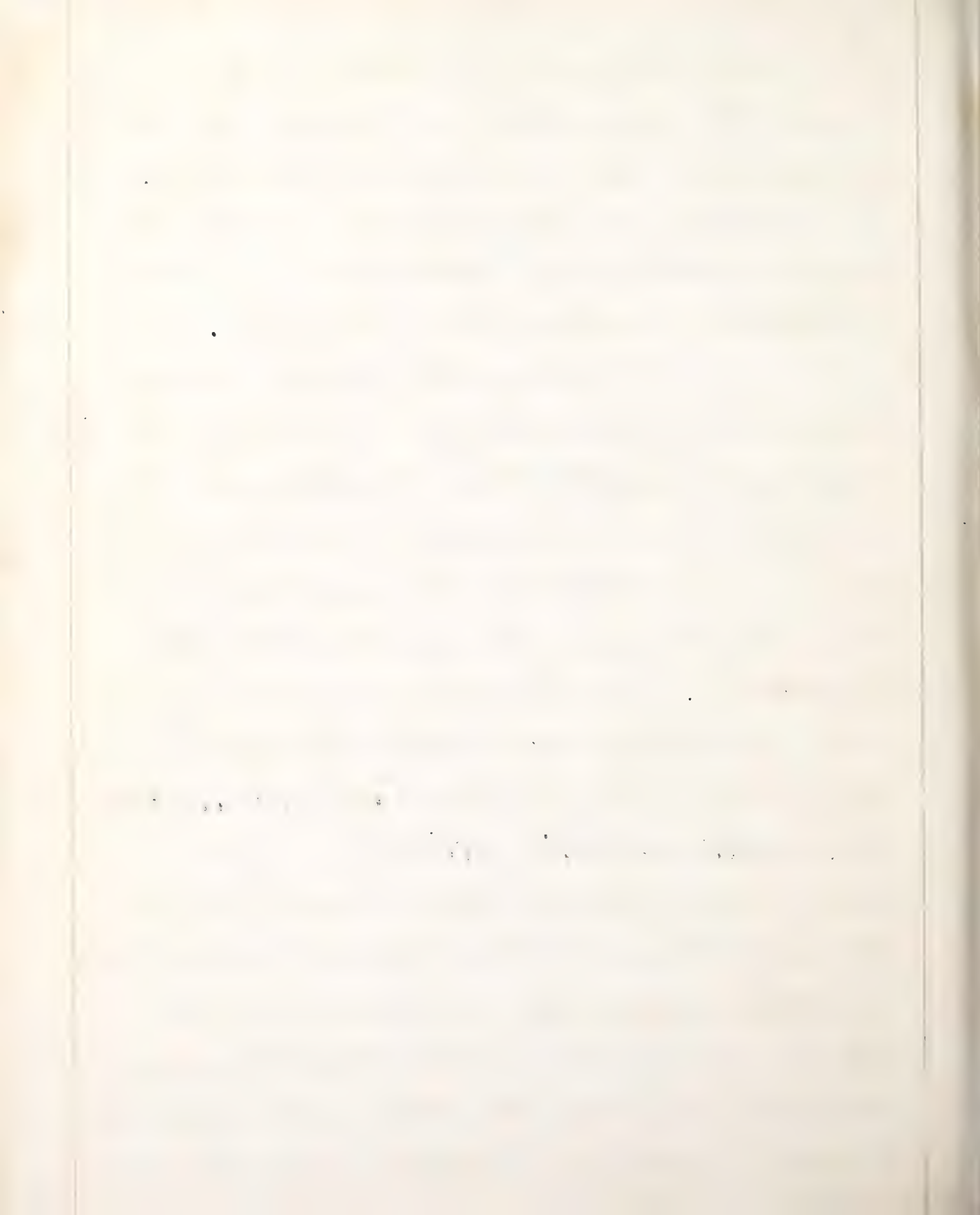


from the vulva, to expel the body.

When the child is born, the accoucheur should place his hand upon the abdomen, to ascertain whether there is another child, and the state of the uterus.

This attention is next directed to the child.

When the child is born, it usually begins to cry. This is prevented sometimes by a collection of mucus in the mouth, and fauces, which should be wiped out. The child's head should be held in a depending position, and with the finger, the accoucheur can feel the mouth from it. After respiration is fully established, the child should be separated from the mother. Pass a ligature around the cord, about an inch from the umbilicus. When separated, it should be taken from the bedside. If the uterus should be contracted, the accoucheur should sit down to deliver the placenta; if not, friction should be made upon



the abdomen, over the uterus, until it begins to harden, and is found to be going down into the pelvic region.

In such cases, the placenta is found occupying the vagina, and can be delivered without any trouble.

If the uterus should not contract by friction, he would, of course, resort to other treatment.

Sometimes the neck of it will contract, while the ruptured vessels are pouring blood into the cavity of the uterus. In such cases, it will soon become greatly distended; the woman will become faint, and pale; and unless soon relieved, will die.

The proper treatment, in such cases, is to pass the hand into the uterus, gradually dilating the os tince, for the purpose of giving exit to the blood; then by friction upon the abdomen, over the uterus, and by



irritation within, it is ordinarily made to contract.

There is another species, the hour-glass contraction. The placenta is retained in the fundus of the uterus, while its body is contracted. The treatment of this is, to pass the hand, to dilate the stricture. When this is done, the accoucheur can grasp the placenta, and bring it away.

The contraction of the uterus is of the greatest importance.

It should be well looked to.

Orders should be left with the nurse, to pay particular attention to it. If it should be found, at any time, larger than usual, friction should immediately be made over it. The woman is often troubled with after-pains, which should be relieved by opium,

camphor, enemata, &c.

If the lochia should be too great, astringents should be given; if it run into the green-water, the woman will require tonics, and astringent enemata.

Her diet should be of the mildest kind, until the milk is secreted; then to be gradually increased.

S. B. Maynard









XV,

Dissertation
on
Empiricism.

By
Alfred Patten Monson,
of New Haven,
Candidate for the Degree of Doctor in Medicine.

The dishonesty and hypocrisy of those
who pretend to cure all diseases by
some specific, or one exclusive mode
of practice.

They would think that
had already been enough said and
written on the subject of quackery, and
that that the further discussion of it
was superfluous. I do not think as
many do that we should be contented
to let it have its free course, although
no doubt its barren fruit now, in time
will signs of sterility and ultimately
vanish even if unchallenged, for truth must
stand and error as surely fall.

Be it to itself however its end will
not be realized until medical science

was advanced much nearer to perfection, now
until quackery has accomplished a vast
amount more of evil, and either directly
or indirectly slain multitudes of human
beings.

Quackery is a great physical &
moral evil, and an enemy to all prog-
ress in medical science. The random
applications of quackery are no more just-
ifiable than the use of the lancet,
which aimed at the seat of life, by chance
opened an abscess, which the resources of
surgical skill might never have
reached, and thereby removed that which
otherwise might have caused a fatal
termination.

It is true that medical men may,
and do often learn something from
observing the practice of quacks.

It is possible that they should avail
themselves of all practical resources for
improvement in the healing art, but all

the instruction derived from this source is small, and of no account compared to the suffering and death inflicted on the human race by ~~their~~ ignorance and presumption. Should we not then instead of leaving the existence of quackery to cure itself, endeavour from a sense of pity to suffering humanity to enlighten the public mind on every occasion which presents itself, that we may — and without the charge of doing it from motives self-ennoblement — ultimately destroy the many-headed monster.

How often do practising physicians witness the fatality produced by the agency of quackery and the most absurd treatment of diseases without any comment which extends beyond the medical circle, and the same scenes are enacted over again; and other victims sacrificed.

To whom does it belong to vindicate the right of suffering humanity, here,

It is not to the uneducated to indicate progress.
For such intentions to be useful, they must be
future generations ^{at least} would feel some gratitude
no doubt. We have a natural inclination
ingratitude for benefits, and particularly
so to physicians, but this should not
deter us from relieving them from
danger or distress. We should not
hesitate to render assistance in a
case of intentional self poisoning.

Why should we hesitate here where we
know multitudes are following a course
which is slowly but no less surely
destructive.

We are accustomed to con-
sider this subject in merely a profession-
al, or scientific aspect. But can we
as members of an enlightened profession,
as benevolent and christian men, with
clear consciences, neglect to view the
evil of quackery in a moral light and
to point out its fatal results to our

fellows men. If it is the duty of every man to expose dishonesty, how much more is it the duty of the enlightened members of a liberal profession where results of such vital importance are involved. If a man knew another to be a thief, a robber, or a murderer, and should not trouble himself to make it known, he would be pronounced hardly less guilty than the criminal himself. Now physicians know well the dishonesty and frauds practiced by these miserable quacks. The mass of the people are not aware of their impositions. Then is it not the absolute duty of physicians both for the good of the public and for the promotion of medical science - to say nothing of themselves - to throw all the light ^{in their power} on the contemptible character of quacks? The object on the present occasion is to direct the attention

to their dishonesty and
glaring hypocrisy. Some men no doubt
are led into the practice of some form
of quackery through mere ignorance.

They with certainty find their own ruin,
and are soon destined to neglect
and obscurity.

That class of quacks which more par-
ticularly requires our consideration is
composed chiefly of those who have
received a regular medical education.
It seems strange how a sane man
who has patiently studied medicine
for several years can throw aside
all his knowledge thus gained, and
arm himself with the most pretentious
or with the most ridiculous talisman tractors
or magnetism, or simple water, or any
other ^{single} preparation with which to combat disease
in all its various, and ever varying forms
and modes of action. Every man
of common sense would say that such

a person had lost his reason and that he was evidently laboring under a monomania. It might with more propriety, be termed money-mania. Take for example, one who pretends to believe and practise on the doctrines - so called - which Hasbrouck set forth.

Follow him to the bedside and notice how he manages there. See if he trusts the cure of any acute disease to the administration of infinitesimal small doses of medicine, rolled up in pills almost invisibly minute.

See whether he fires mustard seed or buckshot, or even if he does not bring out some big gun from the medical catalogue, or even - See if he does not use pretty nearly anything too.*

See if he practically entertains any views of nature's medicines inculcating fear by agitating them too much.

See if he attempts sustaining life by prescribing broths made of the shadows

of birds. See if he often practises on
the doctrine that "like cures like".
Ask him if he believes that he him-
self has got or ever had, the itch.

You will then find no such absurd
idea thought of by him in earnest; no.
But you will find him bringing to bear
on the case all the knowledge which he
has of disease and of the materia
medica, which he in words denounces
and condemns.

It is not probable that there exists
a man who believes in doctrines so
disgustingly absurd, and to insist
which there is not any rational founda-
tion. Let every man then who
denominates himself a homoeopathic prac-
titioner be known as a downright
hypocrite; a more significant and
appropriate name, and one which will
decide no one. A name which has
truth for foundation, instead of error.

and deception. There is no more reason why such dishonesty and hypocrisy should be any less despised in this case than in any other case of false pretence. Yet it is allowed to go unpunished and almost unthought of.

He should be seen a thief or a robber quite as worthy our confidence as such a character. In fact, any person who would resort to such a means of subsistence any one would at first thought consider nothing more nor less than a natural fool, and that he, in turn, thought ~~no more of him~~. In this the homeopath would have some truth to support him. But it is no less strange than true, that it is not the ignorant alone who employ empirics. Instances are not wanting where people of the highest intelligence - otherwise - have of their own choice trusted their lives in the hands of such ignorant pretenders. Thus they encourage dishonesty

and the falsehood of their sagacity, and many others, into similar traps.

Henceforth, it may now be said, is not its day, and it will shortly be numbered among the things which were. Like a multitude of other humbugs, it has been weighed in the balance and found wanting. It is now not of much interest to any except to a few who have neither integrity nor honesty, nor any other commendable quality which can render them profitable either to themselves or others.

But as one method vanishes another quickly supplies its place, invested with all the attractions and mystery with which novelty, generally, clothes itself. Anything may succeed, no matter how absurd, provided it has the least plausibility, and will sufficiently blind the wise people by confining their attention to some one point, which may be—after all—in itself insignificant.

It has not always even the charm of novelty. Look at one of the very latest schemes which has entered the money-maniacal brains of these versatile characters, viz hydropathy. Is the therapeutical application of water anything new?

Every one is aware of the inestimable value of water. The inconvenience attending its external application has always been a great obstacle—and still is—in the way of its more extensive medical use.

At this time for anyone to pretend that the therapeutical use of water is any way a novelty, or that it will supersede our other remedies, is nothing but a farther exemplification of the principles by which all these persons are guided, unless it be the result of profound ignorance on the subject; as is the case with many other so-called new discoveries.

I would give hydropathy all the credit

which it deserves, and so of any other pathy,
and, no, more.

The application of water, however, with
the use of water can be had re-
course to with all the conveniences
which could be desired, will, no doubt
render it susceptible of a much more
extended application, and, production
of results which could not other-
wise be obtained. Such results,
are very liable to be confounded
with the results of other causes.

The physical changes and relations
and relations of surrounding objects
to the patient, which are too num-
erous to mention - should by no means
be overlooked. Allowing hydropathy
to be all it claims to be, the
use of one remedy to the exclusion of
all others, and part with one's medical
library - as one at least has done - is
foolish and madness.

It is to me as if I had seen a man
- as if a carpenter should resort to
the use of a penknife to accomplish all
his labor: rejecting every other instrument.
Such an act, in a carpenter would be
considered a sure sign of derangement
of mind. If then, such an act would be
condemned in that case, how much more
in a case where life is concerned.

Wherefore if those who support such
false notions as we have been consid-
ering are not suffering under a derange-
ment of mind, they are to be considered
as rational beings, and as such they
render themselves obnoxious to the
charge of hypocrisy, and justly, deser-
ve the execration of all mankind.

Alfred P. Knison

Note

Sir James Johnson—the learned and reputable editor of the *Medico-Chirurgical Review*—in whose capacity the work of the medical profession have the most general confidence, states that in post-mortem examinations of a number of cases which had been solely attended by the French physicians, he had found large doses of powerful medicine in the stomach, particularly of calomel.



XVI.

Dissertation

on

The Quack and his medicine.

By
James O'Reilly,
of New Haven,

candidate for the Degree of Doctor in Medicine.

The Quack and his medicine.

Gentlemen

It must be a cause of the greatest perplexity to the philosopher, when he finds himself outstripped, in his course to fame, by some obscure individual, whom he had thought no way worthy of his intercourse; nor of sufficient capabilities to contest his laurels, or call in question his merits.

And this perplexity will be heightened still more, when he finds that public opinion, is rather inclined to uphold his antagonist in his impertinent pretensions, and apparently pays little or no attention to the agony of mortified science.

But had this philosopher studied more the nature of man, had he explored, the truth "that it is only the uncommon and Supernatural which is most powerfull in carrying away public approbation" he would be less ready to condemn and give vent to his disappointment by his lusty anathemas.

Among those who more daringly invade the sublime regions of our science, without a passport in the shape of a diploma, is that noted character the 'Quack'. The writer of this dissertation does not possess sufficient philological acquirements to give or investigate the derivation of this all important name. But there can be no question as to its antiquity. Before the creation of man

when an omnipotent being, deemed fit, to place in this planet the
various living creatures by which it is inhabited; and in particular
amongst them, that grandfather of galvanism the frog, whose
force by the power of his abdominal muscles his lungs were vacated
he articulated that all sorcerers and quacks ... and a thousand
and sold his brother-in-law ... However, this might have
been; I doubt not that an investigation of the materials with
which the quack at times performs his wonderful cures and
miracles, with ^{which} he raises the desponding sufferer from his dreary
couch; may be highly instructive to him who is about to commence
his career in the field of medicine. Nor we are well aware, that
gentlemen of the highest acquirements in the profession, often fail
to become as successful practitioners; because they are bent to tread
in no other path, but the one an ingenious science has revealed
to them, and despise to take a hint however, useful & practicable from
common sense. I as gentlemen they even prefer to dispatch a patient
with a passport in the shape of a prescription than to cure him in
an unscientific manner. Unlike Diogenes of Gore who said he
would not die as long as he could learn from a beggar boy.

When does the all potent and mysterious power of the quack
consist? is it in his medicines, his balsams of Gilead, his lavender,
coloured fluids &c &c? I am inclined to think your answer

with me in the negative. For thanks to the enlightened instruction
we have received; we too well know the active principle of drugs, that
Such a barefaced deception could ever blindfold the proper descendants
of Hippocrates. Is it his learning then? who expects learning from the
Quack? Whose very occupation is a continual transgression on
knowledge and art; whose most powerfull agents are deceit and imp
-osition. a person of great boldness and enterprise, perhaps, of common
sense and rare acuteness, possessed of a penetrating eye, a happy
countenance and well versed in the passions and longings of individ
-uals; but learned gentlemen? learned by no means. There is not
ing in the manner in the individual, shewing the smallest glimpse
of it; on the contrary, we consider him the legal offspring of the
marvellous and the ignorant. Studded with blunders, ~~and~~ an impatient
desire of doctrines and theory. What is it then? in answer I say it is
the superior skill and tact with which he operates on the mind of
man, it is his unparalleled impertinence with which he promises
a cure in an apparent hopeless case. His words full of confidence
sink soothing and refreshing into the heart of the desponding
sufferer; his very appearance acts on the worn out system, as a gentle
anodyne, as a quiet lulling nerve. He summons hope to his
powerfull alliance, he reanimates the exhausted nervous influence,
by holding out the smiling prospect of continued life and

death; he migrates solely by a glance of his confident eye. His inert medicines become powerful agents by influencing the imagination, as you are aware the latter readily impressed is eminently curative. And in this manner the lamp of life which had flickered ready to depart, is staved, and burns with a brighter flame. He cares not to dispute or inquire about the scientific name of the disease. The nice distinctions of Pathology are unknown sounds to him. Physiological technicalities have never confused his mind; as to anatomy it is sufficient for him to know, that a man is made of flesh and bone, and that arteries will bleed when wounded, and that there is a receptacle for food called the stomach; and perchance his small stock of knowledge leads him to infer, that there's a posterior outlet from thence. But he is well acquainted with the mysterious operations of the mind of the human species, he is able to calculate with certainty the improprieties of mental treatment. He studies the character and habits of his patients, and instead of applying to the host of scientific remedies, he relies on the powerful assistance of a regenerative nature.

The above brief outline gives a view of the secrets of the Quack's success, and by way of illustration permit me in a brief way to give a case;

In those days before Matthew had arisen, and went forth to
grapple with the enemy that was preying on the vitals of my
poor though generous countrymen; the demoralizing agent was as
it were, adding an extra link to the chain by which they were
already bound to the imperious will of their monarchial rulers.
On the neighborhood from whence I came, there was a Quack known
by the name of Jim the doctor. This worthy was famed the country
round as an extraordinary man. The diseases which he more
particularly cured, were those brought on by intemperance.
To him resorted, the miserable wife with her diseased husband,
broken down by the long continued use of whiskey; ~~and~~ her also went
the loving mother, with her dissipated son; and indeed various were
the individuals cured by him; sometimes I see him now, with his
good humored visage lit up with a radiant smile. He was a
rare combination of blarney wit and eloquence, he delighted in his
calling, was a genius in his way and only wanted the polish which
which education would impart to make him perfect. For all cases
his remedy was simply the following. He has a powder (doubtless made
of whose virtue he boasts much; a portion was carried in the patient's
pocket, at the same time he cautioned him, that if he went down
spirit of any kind, while under cure, the remedy would prove value-
less; and as you can perceive he actually effected many cures.

It is a matter of practical interest, thus to dissect, not only
quackery; but the very gentleman himself and his remedies,
and after depriving him of his ingenious robe, we find after all, the
bare skeleton of an ignorant man, much may soon be learned
from him, for success smiles not always on the scientific, and
a due consideration of human nature, will very often be found a
safe guide through its thousand different Mazy mazes.

But there is a graver question which comes home to our
intelligent minds with more force. How is it that in the face of
these well known facts, quackery still lifts up its standards of
deceit and imposition, with that same recklessness and impudence
as did the charlatans of old; how comes it that in this enlightened
age, where with lightning speed invisible agents fulfill the
commandments of the most simple individual; where the astronomer
directs his giant mirrors to the heavens, and wanders through
boundless worlds and infinite space, where chemistry lifts the
veil from nature's face, and discloses her exhaustless wonders with
mathematical precision. How comes it that this creeping
quackery does carry on its works of darkness in the variegated
shape of Homeopathy, Hydropathy, Thompsonianism, Botanical
quacks & mesmerists? or will off ended science finally have its
long delayed triumph?

Serious judgement answer to this: As long as credulity is an ingredient of the human mind; as long as the light of science does not shed its brilliant rays equally on all, as long as the educated of the people wage a destructive war of opinions amongst themselves, instead of rushing the common enemy, ignorance and imposition; as long as old doctrines are looked on as infallible, and even discovery of smothering science, is received with sneers and distrust; quackery will thrive; and public confidence stayed in favour of our noble art. during the hot fire of the strife, the forgotten quack coolly prepares his pills; and before the laurel crowns the victors brow, he has administered them, and lined his pocket with substantial dollars. Are the public so blind as that they can't see the diversity of opinion which exists among the profession; on the one side comes a host under the banner of Chronothermalism pointing to the many mischiefs perpetrated by the Antiphlogisticators & branding them with the cognomen of bloodsuckers. The lancet they say is the instrument of mighty mischief; it sweeps away more than the sword; They regard the blood as sacred, on no account is a single drop to be shed, not even a little drop; they say all diseases can and ought to be cured by their system alone. Bloodletting with the tartar is considered a universal panacea. By it in force the arterial action is lessened; in inflammation the congestion is

relieved; by its magic influence pain is routed; if the pulse is full it will relieve the circulating mass, if small it will remove the oppressed state of the system, if to slow it's an indication of compression for which bleeding is the more failing means to be resorted to; if the patient lives (an excellence) bleeding cures him, if he dies "poor unfortunate man the doctor's done his best, is was a desperate case, no blame from the patient's friends, oh none whatever! but the Doctor thus soliloquising says, perhaps it was not commenced soon enough, nor continued long enough. Still further, do we not find men of educationally sceptical as to treatment of any kind, and boldly avowing that 9/10^{ths} the diseases afflicting mankind, had better be left to the unassisted powers of nature, than to be subjected to the interference, of what they are pleased to term an uncertain art. Do we not find the United States legislature patronise & uphold quackery; and if common people take precedent from those to whom they intrust the reigns of State. I'm sure gentlemen it is not surprising that every barefaced imposition should out of the human mags gain some supporters. While the oracles of medical wisdom propound opinions thus various, while a war of words is thus waged, with respect to the theory & practice of medicine, I say it is not to be wondered at, that many honest individuals turn from it with disgust, considering the science a mere imposition. I accept the

assistance of the Homeopath. with as much confidence as that of
the diplomated practitioner

James O'Reilly

Jan 19th / 87



XVII,

Dissertation
on
Scirrho-Cancer of the female breast.

By
Charles Henry Rogers, B.A.
of Brooklyn,
Candidate for the Degree of Doctor in Medicine.



Paratyphoid

5th. The following is the

the first is from 561 fcs,

with particulars

stages of the disease

and resemblance of it

times appears, is that minimal.

perhaps a very serious form,

the first member being from the Greek, and

the second from the Latin.

of the disease of which we

can't of the disease of which we

we have concluded to adopt

we may remark

we have taken

we have taken

we have taken

... ..
... .. the side
... .. variety, of more than at any other
... .. the causes of cancer
... .. will pass this point with very
... .. I sometimes the disease is
... .. as a blow, or some other
... .. the but I must
... .. often, is result from an
... .. predisposition or cancerous
... ..
... .. perhaps a blow, or any unusual source
... .. the part, may be sufficient
... .. the disease. But continuing over
remarks, we should be ready unable to
... .. light upon this obscure subject
and so pass to another topic, viz. the age, at
... .. this disease most frequently
... ..
appears
the time of the cessation of the
the fortieth to the fiftieth year, the disease

in a so important, kind

11

infectious, it is usually more, or active,
there is a predisposition to an early,
change of type, or more more or less
irregularly, and disturbance of the men. and
more in. — The persons most subject

to the disease are, unmarried females, and
those mothers who have not suckled their
children; and last so, those mothers who
have nursed their children at their own (breasts).
Of the appearance of the disease

its precise time of occurrence can be ascertained

...without pain or measurings
phenomena to mark its presence, except a

...the opposite the nipp's, may have
directed attention to the part and

...the may have felt an uneasy sensation in
the part, a sort of crawling, tickling or

...lead her to examine the part, and

...as well as in an emergency, and

...if ^{not} having in the sexual an

... as seems at first, solid & hard, but soon
it is indistinct & its limits not well defined.

It is remarkable for its hardness, is firm,
unyielding, and almost cartilaginous in
appearance to the feel. It gives to the hand the
sensation of great weight, which, compared
with its volume, is quite characteristic, with

... as many more and more pieces. It is not
sensitive to the touch, causing no pain
to handle or even to press it. At first
the tumor seems to be entirely without

... as many more and more pieces. It is not
sensitive to the touch, causing no pain
to handle or even to press it. At first

the tumor seems to be entirely without
... as many more and more pieces. It is not
sensitive to the touch, causing no pain
to handle or even to press it. At first

... as many more and more pieces. It is not
sensitive to the touch, causing no pain
to handle or even to press it. At first

... as many more and more pieces. It is not
sensitive to the touch, causing no pain
to handle or even to press it. At first

the inflammation takes, or back, or
during which the patient is
often so weak that he is unable to rise
from the bed. The skin around it becomes
puckered, and, that sometimes to the
extent of an inch. The pain increases
in severity as the inflammation is
peculiar in its character and variously
described by different patients, a sort
of urgent, burning, twinging, con-
stricting pain, commencing in the
center of the inflammation and
extending to the circumference, and
from being existing here begins to
extend in the center, the exudation
makes its way to the surface. The skin
becomes elevated, to a small extent,
with a swelling like that of a boil,
which is the result, which proves
the inflammation is not superficial
but deep seated.

to show irregularities in
the distribution is beginning
to be, at a least, visible. But
much uncertainty and variation
in respect. For in some few cases
these glands do not enlarge at all, even
when the disease proves fatal. Sometimes
the glands are enlarged, but the
enlargement is not uniform, and
the glands are not enlarged in
all cases, and the enlargement
is not uniform, and the glands
are not enlarged in all cases.
At length the
gives way, at the part of the thorax
most affected, and there is discharge
of purulent, sanious fluid and
blood, the size of that

...marginal... of the disease,
laying itself with terrible effect along its
course and a terrible issue at last.

After ulceration has taken place, the
edges of the opening become ragged, thickened,
and indurated, sometimes being everted
at others inverted, and of a pale bluish or
color. Sometimes the beginning
of ulceration, the ulcer extends
...

darkish than others, rendering the surface
unevenly considerably rising in some
...

...creases, while sloughing
...ion are going on in some parts,
...tally hard and with
...

...and adding to
...of the ...

it is as if the parts were insensible
 to the action of the dressing, or
 that the dressing is not sensitive to the
 action, so that, in examinations and in apply-
 ing the ordinary dressings, it is not
 sufficient to protect, without the slightest
 harm to the patient. The ulcer
 in every direction, indiscriminately in-
 vades and destroys all the parts with which it
 comes in contact sparing not even
 the most tender parts, such as the
 mucous membrane.
 The vessels are attacked in its progress
 and hemorrhages occur, and
 finally the patient is in pain

... on the left side of the
... but this, although
... of the symptoms, as
... and heart.
... time, is that
... of the tempest, which precedes
... energy, and ruin as it seems
... storm. In the same time, the

the edge of the pre-oral muscle, in the
... or higher up about the ...
... and in the ... part of the ...
... now's strongly marked,
... and innervation

Successively the glands will be removed, for the
purpose of the small, in one disease. The virus
shuts down the arm. It is up to the side; it
swells in an alarming degree, the virus is removed
- the. At length, there is nausea and weakness.

Itches strike through the side; the virus is
altering; the source is discovered,

Such, or something like it, is the main
cause of the disease, when it is possible, we shall

remove many varieties, some of which are not
noticed. We shall do it by a gradual plan, for
two reasons. It is short; it is better than any
other method.

operation. we are seldom able to see the
tumor.

... we find it exceedingly hard, as
much as cartilage & creaking under the knife.
Its color "varies presenting a greenish
appearance, and a white or gray or bluish white
color". The hardness increases as we approach
the central nucleus. Cut in thin slices, it is
slightly translucent. This substance composes
the main bulk of the tumor. The central

...
with a thin, dark, dirty looking, shell
is sometimes very white. As we see, a
+ ...

... its texture rather firm and intense
...
direction. ... these are seen
...
...
...
...

across the middle of the body of the
tumor. It is a dense, white, fibrous
mass, and is surrounded by a
thin layer of yellowish bands which appear
to be the result of inflammation.

This description is intended to represent
the things, as they exist in a
scirrhous tumor which we dissected
at the hospital; and we believe it to be a
specimen of the disease, as it ordinarily

Diagnosis of scirrhous cancer.

Its great hardness, and great weight compared
with its volume, are noticed in no other
except some of the fibrous cartilaginous and
osseous tumors. The absence of all pain on pressure in
its early stages, and afterwards the pain and
other tumors. A few scirrhous are at

and layers within them, and the level of the fibrous
and cartilaginous are knotted or banded
But now, we believe, project so distinctly
into the adjacent parts; so that its nature
becomes one of our most valuable signs.

The tendency of the tumor to distort
up the skin and distortion or retraction of the
adjacent parts is a partial sign.

The adhesions to the adjacent parts, skin
muscle &c. accompanied with insensibility
to touch, is not found except in the
species of carcinoma and perhaps the
fibro-cartilaginous tumors. (Continued to
next page)

is liable to the same exceptions but is valuable

to decide the character of a tumor with a good

degree of certainty

and

Prognosis. In the majority of cases the
inflammation is uniformly fatal, with
uncommon exceptions (rare) cases of successful
treatment. Even in cases which are apparently
receding, the patient is in danger of a
relapse so long as the inflammation is not
entirely removed. In some cases, particularly in
the lungs, the inflammation is so localized
that it may be cured by rest and
care. There are also cases in which there seems to be
a spontaneous cure, the patient
becoming gangrenous, sloughing and
eventually curing. But these exceptions to the
general rule are very very rare.

Treatment. (1) medicinal remedies
many have been extolled as specifics, and many
plans of treatment recommended as a cure for
the disease. But the tests of experience, have lost
their reputation and we now know of no
medicine or plan of medication, which has the

... object our views to the
Surgical treatment. That the disease has
been occasionally cured by extirpation with
the knife or caustics is, we believe, admitted
by all. The question of its curability
the question of its curability. Of the caustics
arsenic and antimony (arsenious acid and its
salts) are the most commonly used
and are especially when it is applied to
of their liability to destroy the patient
producing their constitutional effects; and
are productive of too much suffering to
be resorted to in the early stages of the
disease. The use of these caustics is
therefore confined to the late stages of the
disease when the patient is unable to
suffer and when the disease is
in its last stage.

... skin around the tumor, in the
... the track of the lymphatic
... between these points becomes thickened
& indurated; the pores appear larger and the skin
is ... of ...
cases the disease is almost sure to return after
an operation, and in the experience of some
surgeons it has seemed to return and dispatch
... sooner than if left to itself. If the
...
...

the diseased glands must also be removed.

...
are.
...
...
be entirely sure that such is the case, we may
operate with the same hope of success as in cases
of thus complicated. The enlargement we
... after the removal of the cause of the
... and if the operation would be suc-
...
...

involving a disease of any of the internal
organs, or of any deep seated disease, in fact
which would most probably prove more severely
proved to at a more advanced period, in operation
is more to be indicated. Also if
the disease is indolent, advancing but slowly
the patient most likely will not die of the disease.
There are also cases in which it would be
proper to operate, not for the purpose of
but to relieve the extreme suffering of
the patient.

It is also to be remembered that the
operation is not to be performed in the
same manner as the operation for the
removal of the gall bladder.

again operate, very properly, and as often as
the patient will submit to it, provided the
same state of things remains. In support
of this we shall simply mention a case as
given by Dr. Knight of this institution. In the

eighty years of age. In this case was a cure and

involves the success of an operation. The manner of performing it is also of great importance. For instance, in a portion of the case is kept by itself its radiations. Others are of the

tion is left, it will be sufficient to kindle up the disease. The whole, and should be removed, as in some cases it is left, it will most likely become the seat of new nodules.

When we come to the stage of open cancer, a more serious consideration must be given to the question. Let me now mention

some mild dressings, to which have been added some of the radiations

relieve present and



XVIII.

Dissertation
on
Inflammation.

By
Augustus Sammis, B. A.
of Norwalk,
Candidate for a Licence.



Inflammation

The term inflammation is applied to that morbid condition which resembles closely in its features and effects, that which results from the application of fire to the living body. It is a pathological affection of the human system, which has excited more than this, the interest of the pathologist, with reference to the conditions essential to its existence, & the mode of treatment applicable to it in its various modifications, and it is sent in the different organs & parts of the living body, one of such importance is it, that some pathologists have been disposed to refer all morbid conditions either to its presence, or as a result of its previous existence. The opinions with reference to its nature and modes of action, at different periods in the progress of medicinal science, have varied with the different views that have prevailed during those periods. Speculation has run wild, and fancy and imagination have, at different times worn the most fantastic, and we might say ludicrous respecting the nature, causes, and treatment of this affection. But fanciful as they may be, and although inconsistent with those lucid & highly interesting deductions which have resulted from a more intimate acquaintance with the anatomy and functions of the human system, from careful experiment

and an impartial examination of its nature and course, &c. &c. they may afford us the advantage of an owing the many fallacies, which have sprung from mere visionary conjecture and by thus lessening the probability of an incorrectness in our own investigations, and by closing the various sources of error, conduct us into a path which may lead to a correct and reasonable view of its nature, & one that is consistent with our knowledge of the healthy actions of the functions of the various organs of the human system.

Our limits will not admit of more than a brief allusion to the various theories which have been entertained upon this subject at different periods of the world. It is said that the views of Hippocrates respecting the nature of disease, governed those generally of the medicine world, exerting more or less influence over those opinions of various sects, down to the close of the last century. At different eras, as some peculiar principle, exerted its sway over the human mind, all theories were bent to it and from this fact it is probable that reason was perverted and all investigations partial, & directed to one end only, to discover the consistency between the facts that were presented to their contemplation and the one principle they had adopted as the guide of all their investigations.

Thus at one period, chemical science had attracted the attention of physicians, & all disease was attributed to some change in the chemical composition of the fluids. Others again were disposed to refer entirely the operations of the human system to the government of the same laws that control & regulate the operations of inanimate matter. The erroneous views which existed upon this subject were undoubtedly owing to the ignorance of the circulation of the blood, and even after the discovery of Harvey, although the course of the blood in the larger vessels & the connection between these and the lymphatic system had been clearly ascertained, yet the more minute capillary system, which is more immediately concerned in the phenomena of inflammation, was still unknown & this led to the adoption of theories of the same fanciful & absurd character as had existed previous to this important discovery. It was thought that the blood & humors were vitiated by an excess of acid or alkali, or by becoming too viscid or glutinous, or too thin & watery. That the circulation was too rapid or too slow, and even subsequently in the examination of the capillary system, conjecture exerted a powerful influence over the prevailing views of the age. Disease was supposed to arise from the nature of the food

ules of the blood their size and form compared with the vessels in which they circulate, that heat was produced from their triburation pressure and friction, that they were forced like wedges into the small vessels, and deluged, that they were rendered acrid, irritating and inflammatory from an excess of acid, that by stagnation they became cold & congealed, that by powerful reaction the crude mass was converted and dissolved, the tumor subsiding by the formation of pus, and the humors eliminated and conveyed away by the natural passages of the body. The solids also from debility were supposed to be concerned in the production of disease from the imperfect action of the functions of nutrition. It is natural to infer that entertaining ideas so fanciful in their character that their modes of treatment should correspond, & accordingly we find in their list of remedies delugents, insipients, antiseptics, chloretics &c,

But it would be strange indeed, if there were not some faint glimpses of truth amid the numerous errors that so long prevailed with reference to this important subject. Its progress was like that of many other principles in the various departments of science

and as the mind attained more correct views of the structure & proper actions of the different parts of the physical system, its theories became more consistent with fact and at length after winding through all the mazy labyrinth of visionary & conjectural speculation it emerged into the light of a clear & consistent theory upon a subject so intimately & extensively concerned in the various phenomena of disease. It is highly interesting in tracing its progress, to perceive truth struggling with error as theory after theory was demolished by the penetrating minds that successively arose in the advancement of medical science.

With this brief and hasty allusion to some of the erroneous opinions which were entertained in the early history of the healing art we turn to an equally brief notice of those of the present age, & the first subject which is presented to our contemplation is that of the physiological and pathological consideration of the circulation. The nervous & circulatory systems are two principally concerned & affected in the phenomena of inflammation, of the former the ganglionic, of the latter the capillary system seem to demand our primary attention, although

the other two great divisions of each of these systems may be more or less connected with the production of this morbid condition. With regard to the capillary system it has been a subject of much discussion with different physiologists as to their powers, proposing any action independent of the heart & large arteries. Some deny that we have any proof of contractility in the true capillaries and affirming that the contraction of the heart is the principal cause of the passage of the blood through the vessels. But it is now generally acknowledged that they have strong powers of extension & contraction and that their contractility increases in proportion as they become smaller. Their independent action seems to have been amply proved by the various experiments of different distinguished physiologists, some upon the circulation in the mesentery of the frog and web of its foot. Here so long as the circulation proceeded naturally no change was perceptible in the diameter of the small arteries & capillaries but upon the application of a stimulus an alteration in them was immediately observed, the contraction continuing sometimes, for a considerable length of time at others ceasing in about ten minutes and the

repels resuming their natural dimensions, We have also it is said proof of the contractility in the different momentum of the blood in various parts of the body. An emotion of the mind as a sentiment of shame or feeling of resentment causes the cheeks to become flushed or by other emotions as that of fear they lose emptiness of their contents and the countenance becomes pale. Also in confirmation of this, the phenomena of local inflammation itself have been observed in which there is increased redness of the part, without the general circulation exhibiting signs of increased activity & excitement; and as it is known that the functions of secretion & nutrition are performed, it would seem absolutely essential to the proper accomplishment of this important function, that these vessels should possess the entire control of the fluids circulating in them.

And yet it is not denied that other causes may exert an influence over their activity. The increased activity of the general circulation may propel the blood through these vessels in such quantities and with such force as to overcome their contractile power. But this taken in connection with the proofs of their possessing a

distinct power in themselves would evidence, merely that both these causes were concerned in the discharge of their peculiar function. We next come to the consideration of the influence of the nervous system upon the circulation. Upon this subject there has been the same discrepancy in the opinions of different physiologists, some ascribing the action of the heart and arteries entirely to the influence of the cerebro-spinal system, while others adopt an opinion directly the reverse. But ~~the~~ ^{as} ~~an~~ ^{it} ~~is~~ ^{is} ~~not~~ ^{not} ~~an~~ ^{an} ~~correct~~ ^{correct} ~~conclusion~~ ^{conclusion}, it becomes us to give an impartial consideration to the arguments advanced in favor of each supposition. From experiment it has been ascertained that the circulation may continue even after the brain & spinal marrow have been entirely destroyed, but the independent power was exerted only for a short time, becoming gradually less until it entirely ceased, evidently showing that the vigorous healthy action of these vessels is indirectly dependent upon the cerebro spinal system. And again it is evident that it is not directly dependent on this system from the fact that when a portion of the body has its connection with it entirely destroyed as in paralysis the

function of circulation & nutrition have to a certain extent still been carried on. Both systems of nerves accompany the blood vessels, the filaments of the sympathetic following them to their minutest ramifications. The proper conclusion here then would seem to be that these two systems are dependent on each other that their influence on the circulation is united at once showing the entire connection & beautiful harmony that pervade the system, that there is no exclusiveness in its operations, but that they must all combine for the healthy & vigorous preservation of the principle of life.

As we have previously stated, the errors and absurd theories that were formed with reference to the phenomena of inflammation, arose from ignorance of the true anatomy and physiology of parts, but as this advanced theory became more consistent and clear, yet subsequent to the period when medicinal news was entertained, founded on the acute and careful investigations of experimental philosophy, much perplexity existed as to the actual condition of the parts concerned in the manifestations

of this disease. It was found difficult to render consistent the fact of swelling which must result from an increase in the size of the vessels with the idea that in an increased activity of them there must necessarily be also an increase in their contractile power and a diminution of their caliber. Hence arose the hypothesis, that all the phenomena must depend on a relaxed condition of the vessels as primary, and this doctrine was adopted by some of the most distinguished physiologists. It probably originated from too superficial an examination of the action of the vessels, during the change which took place in them from the application of exalts to the parts. It has been stated by Dr Wilson, that he could create increased action in the capillaries without producing inflammation, but that when it was established the vessels were found in a state of preternatural distension & debility and similar though slightly modified views were entertained by other investigators. It was apparently ascertained, that certain stimuli applied to living parts induced an increased flow of blood and a contraction of the vessels. During this state of excitement the part affected is so far from giving anything like the

appearance of inflammation that the size of the vessels was diminished, and the part pale; But if the stimulus be long continued or increased in power, the small vessels which in their natural state, admit only one series of globules, become so dilated as to allow an accumulation of a much less fluid and redder blood in them which loses its globular appearance, & moves much more slowly than that which previously passed and if the stimulus be removed, the vessels do not soon regain their original state & that time is required for them to recover their contractile power to restore them to their previously healthy condition & prevent the blood propelled by the heart from heaping up the dilution" Hence it may be inferred that inflammation consists in a debilitated condition of the capillaries whereby the balance between the large and small vessels was lost, and the latter became distended. The changes which occur in the parts & the subsequent contraction of the vessels seem to be correctly stated. But one must not merely the mechanical effects taken into consideration without regard to the vitality & sensibility of the parts. So far as the theory goes it seems plausible, but it appears inadequate to account

for all the facts. When a stimulus is applied to a part there is an increase in its sensibility accompanied generally with some degree of pain & if the stimulus is continued it causes the contractility of the vessels to be a natural consequence of this morbid excitement an increased flow of blood takes place towards the point of irritation which also acting as a stimulus hurries the circulation still more, until considerably more than the usual quantity of blood is collected in these vessels, & as the neighbouring vessels are not equally excited, the flux in the distended vessels is not carried off as quickly as it arrives, hence an accumulation ensues, & a preternatural distension follows, not from a previous debility of the capillaries, but from this fact, It has been ascertained, that blood vessels, like other elastic tissues, are capable of being distended to a certain point without losing their elasticity, but as the pressure of the blood increases, it finally becomes more than they can resist, especially if the larger vessels are also irritated & the general circulation hurried, & with the distension the action of the capillaries finally ceases, for becoming dilated beyond the limits of their elasticity, they gradually lose their power over their contents & thus becoming mere inert tubes

the circulation proceeds in a languid & sluggish manner. Here it appears to me, the debility of the vessels is not their primary condition, but a secondary effect resulting from over distension. As a natural consequence of this altered condition of the part, its healthy functions are interfered with. The natural change in the blood ceases, retaining its pink red appearance not only in the capillary arteries, but also in the veins, the coagulability of the blood is increased by a deficiency of serum, & the globules becoming blended the functions of the part are finally almost entirely suspended. The condition of the part then seems to be the following: an increase in sensibility and quantity of blood with a morbid distension of the vessels, swelling & redness, throbbing & increased pressure, increased heat, and pain, the circulation at first hurried, then languid and oppressed, with an interruption of the healthy action of the part. This is called the state of active congestion or first period, which by an increase in the morbid action is followed by inflammation, succeeded by a number of phenomena which give a full & decided character of the disease.

There may be a debilitated state of the vessels, resulting from many causes, allowing an accumulation of blood in them.

and a slow embolus of circulation with swelling of the
part & an inflammation takes place from the stimulus of
the blood inducing subsequently inflammation which may
remain, in this condition, which is called passive
congestion. In the one there is complete cessation of the ac-
tivity of the heart, in the other reaction ensues, a vital effort
to restore the part to its original healthy condition, char-
acterized by an increased circulation followed by the
gradual manifestation of the symptoms of inflammation
now,

Another point of much importance in the consideration of
the phenomenon of inflammation is the morbid appearance
as in dissection. Our knowledge of disease must depend on
its accuracy, not merely upon the symptoms as they are pre-
sented in the living body, but on those combined with the
changes that may have occurred in the tissues as an effect
of the morbid action, which has been at work in the sys-
tem. But a difficulty here presents itself, the fact that
there may be appearances resembling those of inflammation
which are only exudative. The different parts of the
body assume various degrees of redness after death, which are
liable to ascribe to the effects of disease. That such is

the fact, is now generally acknowledged, By carefully inspecting the organs immediately after death & noting their color and appearance, by a subsequent examination we shall find that these appearances have changed, Parts naturally white will have become red, and the light red of other parts will have assumed a deep red & congested appearance and vessels be seen where none were previously perceptible, and it is also possible to produce these appearances in different parts by placing the body in different positions. There may be red putrefaction in various parts, red lines following the course of the blood vessels, arising from the forcing of the blood through their walls, and rejecting the parts, and also the bile stains of the organs near the gall bladder have been mistaken for a morbid appearance, The red and rejected condition of the more substantiated organs as the lungs, heart &c probably arises from the constructive action of the small vessels, after the action of the heart has ceased; also the disengagement of gases from the putrefactive process will produce different colors in the organs, from their penetrative power changing the fluids and affording brown green & blue tints, &c.

Being aware of these facts, it is necessary therefore to

make a careful distinction between those various cutaneous affections and those which are the result of disease. From the facts stated above it is clear that redness above does not evidence inflammation, neither does a distension of the vessels and tumefaction or increased thickness of the of the parts, as all these take place in the living body without inflammation or death from the gravitation of the fluids & their transudation through the walls of the vessels. The following are stated to be the only sure signs of inflammation, Considerable increase of vascularity with extravasation of blood or coagulable lymph or the formation of pus & other products. A very minute injections chiefly of small arterial branches; a purple color disposed in dots or streaks occupying the whole thickness of the tissue and not removable by pressure or abstraction, spots of ecchymosis occasioned by the rupture of some of the small vessels, effusion of blood on the surface or its infiltration within the texture of the part. But several of these appearances result also from mere passive congestion as redness and spots of ecchymosis &c. The distinction between them is that the injection here is sent in the veins, and has a dark color, while that

while that of active congestion exists in the arterial vessels & has a bright pink hue. In the former the texture is flabby & loose & may be easily lacerated, while in the other there is a firmness of texture, indicating that a higher degree of activity has previously existed in the part. It is acknowledged, that at times it is almost impossible from these signs alone to distinguish accurately between these two forms of congestion, we must ergo take other circumstances into consideration as mode of death whether violent or mild, also the nature of the disease affecting the individual as these are diseases of the heart, asphyxia &c which may have been agents in the production of a congested state of the membranes of the body.

Diagnosis This may be considered in two divisions, 1st When the inflammation is external, 2nd When it is deep seated, affecting the internal organs & tissues. In the former it is local existing within certain limits, & without the system being generally affected. In the latter it may extend to the whole system sympathizing, inducing constitutional symptoms &c. In the former we find local signs apparent to the eye & touch. They have been stated to consist of four, color, calor, tumor & rubor. The pain which accompanies inflammation may vary much in its intensity from simple soreness of the part to the most

violent suffering. But this alone is not always indicative of inflammation, as it may arise from nervous irritation in its most exciting form without any redness or tumefaction of the part. Now it arises from the irritation produced in the nerves by the exciting cause, or from the new contraction which the parts have assumed producing a compression or distension of the nerves. There may be throbbing pain resulting from the compression of nervous matter at each pulsation of the artery, & the character of the pain will vary with the texture of the part, also be in proportion to the number of nerves with which the parts are supplied & also to the severity of the inflammation. When the nervous filaments are numerous the pain is acute. When the parts are firm & unyielding it will often be exceedingly severe producing constant pain at distance in the skin it is pricking & burning, in serous membranes sharp & lancinating in the mucous and cellular tissues, dull & obscure. When it is heavy and throbbing it is indicative of suppuration.

Another symptom is heat. The elevation of temperature in the part is perceptible not only to the patient but also to the physician. But this symptom alone cannot be relied on as indicative of inflammation. As this elevation of

temperature may arise from many other causes, and it has been remarked that it would be useless to attempt to give an explanation of the cause of this phenomenon, as probably no perfectly satisfactory theory has yet been established with reference to the source of animal heat. It is summarily stated by one author to be owing to the blood passing in greater quantity & increased velocity through certain of the vessels which continue permeable. The tumor or swelling arises first from the dilatation of the vessels by an increased influx of blood, and then by the subsequent effusion of serum, coagulable lymph. We may also remark that neither is this sign alone diagnostic of inflammation as it may arise from various other causes unconnected with inflammatory action, and the extent of the swelling will also depend on the severity of the inflammation and texture of the part. The redness arises from an increased quantity of blood in the vessels. But the redness may be occasioned by a transient hurry in the circulation producing a momentary flush unaccompanied by the other symptoms of inflammation. This must be merely a natural consequence of increased healthy action; to become a morbid condition it should be permanent & accompanied with pain heat and swelling. Its intensity will also vary with the texture of the part.

In fibrous membranes, in cartilage & tendon &c it is slight while
in the mucous & similar membranes it assumes a bright, vivid
hue. It may exist in different shades, from bright scarlet, to a deep
purplish color, deepest in the centre, and shade gradually off
into the surrounding tissue. Such hues are the local symptoms of
this affection. But when internal organs are inflamed, these
signs may afford us but little assistance in diagnosis. In such
cases we must form our diagnosis, when the general symptoms
in connection with the disordered action of the organ itself.
But one of the previous signs can aid us here, viz the pain and
yet this is not always present, as certain tumors may be inflamed
as the disease terminate fatally without this evidence of its
existence although it may generally be discovered by pressure.
But one of the most important symptoms is the disorder in the
function of the inflamed organ, with an irritative state of the
constitution characterized by the usual febrile symptoms &c
besides, there various other signs are pointed out, as indicative
of the different localities of the disease, which consist in some
unnatural expression of the countenance, change in the
voice & actions by which the healthy performance of the functions
of the internal organs are manifested to our senses. When seat-
ed in the brain the face & eyelids are congested & the

eyes were a wild staring and heavy expression. A distension
of the blue nose & a drawing up of the corner of the
lips & cheeks with protrusion of the eyes & heaving of the
shoulders indicate a rent in the thoracic viscera
A sinking of the cheeks & drawing downwards of the an-
gles of the mouth with a pinched and pallid appear-
ance of the features and sunken eyes indicate an affec-
tion of the viscera of the abdomen. When it is seated in
the brain it is also characterised by delirium & convul-
sion, by coma & convulsions, when it is seated in the
larynx the voice is shrill, hoarse & feeble, with a pressing
sensation & difficulty of breathing; in the pharynx it is
characterised by difficult deglutition without any affec-
tion of the voice or respiration; in the lungs by cough
more or less bloody purulent expectoration, shortness of
breath & difficulty of breathing; in the stomach by severe
pain in epigastrium with burning heart, excessive nau-
sea and vomiting. The terminations of inflammation
are briefly the following. 1st The morbid condition may
pass away without any alteration in the structure of the
parts by what is called resolution, 2^d it may transfer its seat
to another part of the system, by metastasis, or effusion may take

place when the suspended function of the part is restored; in suppuration or the formation of pus, in gangrene or the complete death of the part, in incision or a continuance of the humor or in the opposite state of softening, occurring in the huminous membranes, &c. Treatment, It would seem necessary to premise that there is no absolute modification in this adapted to the severity of the disease, whether acute or chronic, to the state of the patient & the nature of the organ affected & we must also consider whether a relaxed condition of the extreme vessels or the activity of those communicating with them elements our first attention. In general in the treatment of inflammation, two indications are laid down as essential. 1st To reduce the amount of blood circulating in the vessels & the activity of the heart & arteries, 2^d To diminish directly the excitement in the part and modify the morbid condition of the extreme vessels. These two indications are not however always present. In all cases of active inflammation accompanied with severe constitutional disturbances, general blood letting is of essential importance particularly so when it affects important organs. Although no precise & definite rule can be laid down as to the amount of blood to be abstracted there are several circumstances that may guide us in the proper employment of this remedy. 1st Among the symptoms of internal inflammation is that of the dis-

turbance of the function of the part. When this is restored it is
sure evidence of the cessation of the morbid condition. But if it
has only partially been restored or a relapse has followed, the fur-
ther abstraction of blood will be necessary. Another symp-
tom which attracts our attention is the pain & sensation as
a powerful & appropriate means of subduing it, but should
be employed until this symptom is relieved. But should this
only be partially relieved or recur again it indicates further de-
pletion, but particularly does the pulse demand our attention
yet it varies in its character. In inflammations of one kind
it is frequent full & strong in others hard & tense. These
conditions of the pulse being indicative of the employment of
this remedy it should be continued until the pulse is brought
as near as may be to the healthy standard, but however im-
portant this symptom may be in the indications for
the use of the lancet it cannot always be depended on alone
but it must be combined with the other signs as in some cases
of inflammation it may not exceed the healthy average or some
peculiarity of the person may render it when taken alone an
unsafe guide. We must also have regard to the duration of
the disease as when the disorder has been permitted to pro-
gress for a time the efficiency of this remedy becomes limited

But as we have remarked, the two indications have often
not always present as there may be cases in which although deple-
tion is indicated, general bloodletting may not be required.

In such cases we have recourse to local depletion as when the
inflammation is slight, the patient too weak & debilitated
to admit of general bleeding & when as we have just stated
the active symptoms have passed &c

There are other remedies, which also possess a powerful control
over inflammatory action, as nauseating doses of the Tartar
emetic Antimony, $\frac{1}{4}$ of a grain in solution every two or three
hours is given to the tolerance of the system. Opium is also
used after full resolution often with the most beneficial re-
sults, by its sedative agency, controlling the power of the heart
& arteries, preventing reaction in the system and removing
irritation. Its different preparations may be administered
as the case may seem to demand either in full doses of
from one to three grains of solid opium or 1 grain of its salts
in solution. After sedation, there is another principle which
exerts a powerful control over inflammatory action, & that
is resolution or desiccation. This is one of the effects of the opera-
tion of purgatives, which is also combined with that of deple-
tion. By inducing an irritated condition of the mucous

membrane of the alimentary canal they exert a dermature
or revulsive influence upon the morbid action of distant
parts of the system. Mercury may also be included under
this class. So important has this remedy been considered that
with many it has obtained the reputation of a specific and the
term inflammation at once suggests this as the remedial
agent and ample experience has attested to its power in
checking the progress of inflammation in many of the tissues
and it is remarked with reference to it, that it appears to have a
peculiar power in arresting or controlling the action of the
capillaries and preventing their changes from taking
place which are so destructive to the organization of in-
flamed tissues.

When its constitutional effect is speedily required it may
be administered after resection, two grains of calomel
or fluid of the hydrargyrum boricum may be given every
alternate hour. But if this is not immediately required
it may be given at longer intervals. Its action on the bow-
els may be restrained with the addition of opium and
so happy is the effect of this combination over internal
inflammation that after resection it has proved it-
self the most efficient remedy we possess.

In reference to topical treatment where the inflammation is
can be reached, it must depend as we have previously remarked
upon the condition of the vessels; when they are debilitated and
relaxed stimulants and excitant applications will be indi-
cated, but on the contrary where there is increased action
in them cold and sedative remedies will be the better ap-
plication to the part. In conjunction both mental and
local rest should be enjoined, and the diet should
be spare and mild.

A. Leeson.

XIX.

Dissertation
on
Sympathetic Action.

By
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Sympathetic Action

We intend not to trace out the beautiful and harmonious effects of this principle upon the social system, but view it in some of its relations to the animal economy.

Of all the laws established by a beneficent Creator for the government of the living system there is none so all-pervading in its influence as that principle called sympathy. Perhaps this law knows no exception in its influence upon the different organs and tissues whether contiguous or remote throughout the whole body. So intimate indeed are the sympathetic relations between the various parts, that no structure or organ can be strongly irritated without causing a sympathetic irritation in other organs or tissues. The primary irritation of the sanguiferous capillaries involves the general vascular system — an inflamed stomach with its extensive circle of sympathetic relations may involve many viscera — a derangement of the liver may impair the function of many of the viscera of the abdomen — and the in-



fluence of tubercles on the lungs may be communicated to the remotest parts of the body.

Of the various causes of this wonderful and mysterious principle of nature many are among her profoundest secrets, which have ever eluded the scrutinizing test of experiment, and upon which the light of truth has never shone; while others are better understood, of some of which we will take a passing notice.

First, the circulating system.

It is rational to suppose that a system of vessels like that employed in conveying the vital fluid whose presence may be found ramifying every tissue must necessarily exert a powerful influence on those parts. Disease may be translated from one part to another through the coats of these vessels or through the medium of their fluid; whereas did not this common bond of union exist, injuries which are often serious in their results simply by being extended to so many parts, would, if limited to the part primarily affected, be comparatively trifling. The preternatural



determination of the blood to any part - an excess of blood in the vessels, or a deficient supply, or a deterioration in its quality, or an irritated state of the vessels, may each and all be a channel of sympathy.

Secondly. The nervous system is another source.

This is one of the most delicately organized systems in the whole body. It is one ever tremblingly alive to every change, and ever ready to ring ten thousand changes on every emotion and feeling. Every emotion and every impress upon the senses is caught up and telegraphed to the remotest part of the frame, and whether pleasurable or painful they are multiplied like the vibrations of the nerve that receives them. Supplying every muscle and ramifying every tissue, they necessarily constitute, from their distribution and delicacy of structure the most powerful source of sympathy. A thought may cause a tear to flow, or the sight of some



delicious object may excite the salivary gland

Besides the above-mentioned causes there is another more mysterious, upon which Anatomy throws no light, and of the nature of which we know nothing, and all we know of it is simply the fact, which is, a mysterious intercourse between distant parts, which conveys therapeutical agents from one organ to another without entering the circulation, such as substances taken into the stomach may pass into the bladder, as proved by the experiments of Home, Wallaston and others. Now whether these substances may be converted into a gaseous state and permeate the various intervening tissues — just as the oxygen of the air taken into the lungs permeates the membranes of the air cells — we cannot say; but may not this intercommunication of remote parts lay a foundation for some of those numerous sympathies between distant parts which so often strike and astonish us?



While contemplating this subject; and one that might appear from slight observation brought with many evils, the question arises, why is it thus? Why was not one system so arranged as to be uninfluenced by another? Why must one part be made to suffer on account of another upon which it does but little if at all depends?

We believe that that physical structure has been created which is adapted in its present state best to accomplish the purposes of its formation. How could nature then, in accordance with her great law so studiously observed, viz. the least amount of matter in the smallest space — bring together such a variety of structures and systems, &c. as wholly to avoid these evils, if evils they are? Such a result would be impossible. But are these sympathetic relations real evils? Let us consider more particularly the "modus agendi," of some of them.

Between the biliary secretions and the perspiration there exists one of the strongest



sympathies of the human frame, & whatever increases or diminishes the action of the cutaneous exhalents, increases or diminishes the secretion of bile in the liver. The perspiratory vessels from long continued action become debilitated and sensible to the slightest degree of cold, so when the temperature of the air is suddenly reduced, the extreme vessels of the surface are instantly struck torpid, which is immediately followed by a similar torpor of the secretory vessels of the liver. The perspiration and biliary secretion being thus simultaneously arrested and the passage of blood through the liver obstructed, a commotion is raised, which, as there is already a congestion in the portal circle, falls upon that system and gives rise to inflammation.*

Again. A fit of melancholy, or a protracted course of the depressing passions causes a derangement of the digestive system, and dyspepsia with its train of horrid evils sends leanness into the body and sadness into the mind. While things are thus going on in the stomach, the heart as though

* (Dr. James Johnson.)



too much interested in matters around, becomes deeply concerned in the affairs of its neighbor the stomach, and ever faithful to the laws of sympathy, also becomes excited and functional if not structural derangement is the result.

In the above-mentioned case of the liver and dermoid system, there might perhaps appear a violation of our deviation from the laws of economy of the human system. But if it is an evil, it is one of those many instances, where a lesser evil has been produced by Supreme Intelligence, to secure a greater good.

We will suppose that this intimate relation between the liver and cutaneous system did not exist. The liver in such a case might not become deranged from any change in the condition of the cutaneous capillaries; but from its intimate connection with other important organs upon whose aid it in part depends for its healthy functions, as well as others upon it, it is extremely liable to become diseased. Now the stomach, being the only avenue to the



liver, must be the only channel through which agents can act upon it. If the stomach should become so sensitive as to reject whatever remedies might be introduced, or if the liver could not be operated upon through this channel, there would be no means of affecting this organ; while some energy, in the form of some malignant disease, lurking within, would devastate and ruin the fair structure, and no relief could be found. But by this strong and intimate bond harmoniously uniting and controlling all parts, other avenues are opened, and if one is besieged, we may by another reach the affected part and often repair the injury. Hence what at first sight seems to be a coincidence with the beautiful law of economy, proves to be one of the most beautiful and attractive features of that law.

Another more universal operation of this wonderful principle we are considering is based on the inconceivable union between the mind and the body. Throughout the whole range.



of medical science we know of no subject of such deep interest to the Physician as the effect of the mind on the body, whether pathologically or physiologically considered. The delicately poised magnetic needle when left free to move is not more prone to assume polarity, or the fluctuations of the thermometer to be affected by the alternations of temperature, than is the body to be affected by the imagination. Could the Physician better understand the hidden connexion between the mental and corporeal, and so to control the imagination as to modify at his will its effects upon its possessor, how different in many instances would be his prognosis. Could he understand the secret springs of thought and feeling - could he inspire the despairing with hope and confidence, banish fear and tranquilize the agitated breast of an agonizing sufferer, how much for such knowledge would he part with, or that of medicines and resturants. The profession at large have overlooked this branch of pathology.



Here is a wide field spread out rich in unexplored truths, which would bring ample reward to the discoverer. The time may yet come when light will dawn on that which is involved in perfect obscurity. Some agent may yet be discovered, far more subtle than any yet known which may now be operating as a medium between the mind and the body.

The power of the mind over the body is so great as hardly to know no limits. The imagination may account for many of the phenomena connected with life, but we believe that it alone is not sufficient to account for all. Some ethereal agent more subtle than electricity or magnetism, if these are not the agents, — some "high road of thought," some common medium between the sensuum and the mind may yet be discovered which will account for phenomena more satisfactorily than can be done on any known rules of philosophy. We believe that electricity has much more



to do with thought and feeling there is something
supposed, that it is the secret spring of energy,
an impulse, and the source of many an emotion.
We know not how the mind takes cognisance of im-
pressions upon the extended portion of the optic nerve.

We know that an impression must be made on that part
of the brain which enables the mind to conceive of the objects
or which takes cognisance of the sensation of hearing
and of seeing in order to see or hear, and if that im-
pression be produced will not vision or audition take place
whether this impression be made through the medium of the
optic or auditory nerves or not? Now may it not be strictly
philosophical to suppose that there may be an agent that can
produce these effects independently of the media of light
and air? Such a fact might be as much at variance with
our experience, as were the phenomena of electricity and mag-
netism with the experience of those contemporaneous with their
discoverers. But this can not render the existence of such an agent
the less probable. Like the relation between minerals and
magnetism, so there may ^{be} as wonderful and curious a relation
between some more subtle agent and the sensorium or the
mind, upon which may ^{be} based a science called the meta-

of the history. The celebrated case of the C. Rider
is recorded by the London Magazine & elsewhere and will
be found recorded as in "Hibernicum, Melicorum et
Chirothorum" as long as it is to be explained on
any known principles of Chirothology.

Chas L. Shelton

~~XX.~~

Dissertation
on
Vis Vitæ.

By
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Vitalitæ

In the animal and vegetable creation we find a peculiar force, a certain oscillating process of non-vital material to vitality, and the cause of this change, the force of this change is called "Vitalitæ" force of life, or vitality. This cause, or force of life minutely examined ascribes the secret of the greater Physiological and happy the strike of the most energetic in the field of scientific researches of human organization and support. There is, as life as the different currents of our own atmosphere, each working before them their mission have been & are not measured, present. The action of our life, or the cause of life from the nature of the code, and to harmonize with the laws of the universe never can be known. The first Great Cause of all things is not within can be comprehended, The creature

cannot comprehend the Creator -

But our subject thus considered should not render us stupid and inert in its denoting to analyze the laws which govern it, or to find the means adapted to assist the vital shock, buoy up the living principle, and furnish means for it to act with and upon. - The increase of a mass is determined by a decomposition of one or more materials. for the composition of the increase of the mass, and this formation process may be nothing more than common chemical affinity as we see it existing between an acid and an alkali.

The cause of this affinity of one molecule for that of a second, and that again for the third, cannot ever be explained, but yet we can easily see it is necessary and must exist in order to support the universe by presented laws. - This affinity commonly called cohesion affinity and acts between the smallest particles of matter,

is manifest only, and acts only when
these are in actual contact or at in-
finitely small distances from each
other. Dead matter is subject to phys-
ical laws which living matter is not, al-
though living matter obeys certain phys-
ical laws which are common to both.
Living matter is distinguished from dead
matter by certain properties, termed, vital
properties, actions, powers and forces, which
properties widely contrast, and differ in
a remarkable degree from dead matter.
Although the actual union of matter
in the animal creation may be and
probably is chemical, as every year dis-
covering goes to prove, yet this vital force
causes a decomposition widely differing
from common electric affinity as shown
in the chemical laws of dead matter,
It causes a decomposition of the con-
stituents of animal substance, and de-
stroys the force of attraction which is

constantly existing between the
molecules of the food. The chemical
forces are changed from the state of efflu-
ity commonly existing in dead matter
and directed to form new compounds
which enter into the system with the
change from living to dead to living
matter, and form the several tissues
of the body. The vital force are not
not like the force of gravitation, or the
magnetic, but like the force of cohesion
requires the ~~force~~ bodies to be in contact
to be in immediate contact.

Let us now a few of the phenomena
of life which arise from the ^{system} body of
man, as well as some of the laws which
are constant in regulating the same, and
in the following remarks it will be observed
that at the end, it is nothing more
than theorizing upon a subject which we
do not know enough to theorize upon.
And we are theorize upon the vital force

It will be evident that the brain and spinal marrow will be the chief source of the sensations which will be made. The brain and nervous system being the "primum mobile," as well as the seat of sensation. We shall only view the subject in a contracted field, and in so doing shall speak chiefly of the functions of the brain and nerves and also refer to operation of the same as generally explained by physiologists. The functions of the brain and nervous system are too well known to require any definition, and shall therefore refer to the phenomenon with that consideration. We will consistently remark that the nerves are the means with which we had communication with all external substances, tongue, teeth, &c. - but it is their function to transmit to us the phenomenon which surround us. The way in which the mind

acts to produce motion, or contraction
of muscular fibre we do not know al-
though it is explained by theories and the
proximate cause is imputed to various
agents. Some physiologists contend stron-
gely that it is an electric fluid, sim-
ilar to Galvanism, thus that it is com-
mon electricity - That it may be the
nerves are subject to a fluid similar
to galvanism, there appears to be some an-
cient evidence, and this evidence is
so impressive in the minds of some
eminent physicians that they do not
hesitate to call it animal electricity
and cite certain facts to assist their
theories, they certainly demand a share
of attention. The facts which they cite
as to are that certain animals gen-
erate or collect it and hold it in sub-
jection for use as a means or agency.
Also the power which Galvanism has
of supplying the means which are generally

necessary in order to carry on vital phe-
nomenon - For instance - if the nerve
which leads to the stomach is conveyed
the force necessary for disassimilation, or
digestion of the food is hindered, digestion
immediately stops. But if a stream of
galvanic fluid is conveyed upon the vi-
sited and leading to the stomach, digestion
immediately commences with all its
irritative effect. Or if further we
take the dead body to experiment upon,
we have demonstrated to us certain
phenomenon which are peculiar to cer-
tain diseases of the nervous system, such
as Spasmodic contractions of the muscles
- The pricking sensation which we feel
when we compress a large nerve, which
produces the sensation which we common-
ly express by the term of the "limb being
asleep," has a strong resemblance to the
sensation which we experience when
slight charges of electricity are taken

from us. Also minute anatomy an-
atomists appear to corroborate this evidence.
If we turn to minute anatomy - we find
the muscle to be formed of minute bundles
of fasciculi of muscular fibres, and many
of these fibres held together by other tissues
and enclosed in a sheath, the ^{true} muscle
consists. - If again we turn to the mi-
nute anatomy of the nervous system
we find it consists, or is made up of very
many minute delicate filaments,
and these filaments composed of a
substance peculiar to the composition
of the brain and nerves, - viz. neurine.
Each filament consists of a cylinder
of neurine, enclosed in a thin firm
sheath of condensed cellular tissue,
called in a collection of these nervous fibres
the neurilemma. Thus each nerve is
made up of the true nerves in a minute
form and the same may be said of the
muscles, and now we will pass to

known as correctly as we can. The relation
which exists between nerve, muscle and
motion. If we trace a nerve into the
muscle we find that the nerve passes
through the muscle lengthwise, and gives
off its minute branches or nervous fili-
ments most of which pass across the mus-
cle. — Hence we have the ultimate mus-
cular fibre, and the ultimate nervous
filament passing each other at right
angles. The above named point is yet
a disputed point, as there is at present
a different theory. By the aid of the
microscope we find these minute nervous
filaments passing off at intervals through
the texture of the muscle and sometimes
forming loops. Most nerves convey two
endowments, the power of motion and
Sensation, or rather they are the agents
to transmit that which determines
motion, and Sensation. That which pro-
duces motion, from the brain to the

spinal marrow, or nervous system, and that which produces sensation, in the opposite direction, conveying impressions and exciting sensations — A step farther and we are lead into the region of hypothesis where our reasoning is a forced and questionable one — guided only by experiments which are analogically considered in order to arrive at a theory. — By experiment it has been proved that a muscle remains quiescent when its fibres remain straight, but if you irritate them, or in other words the while the muscle contracts its fibres are thrown into waving or zig zag lines and hence we have shortening of the muscle. By carefully examining these zig-zag lines, it was found that the point of inflexion always occurred at the point, which the muscular fibre is crossed by the nervous filaments. — It is well known that paralysis is caused by none

communication, or interruption of communication of the nerve with the muscle, and at the angles of inflexion occur at the angles formed by the crossing of the nervous filaments and muscular fibres, and a current of electricity conducted on the nerve produces contraction of a muscle it has been argued that nervous power, and electricity, must be similar. It has been proved, that two parallel wires will approach each other - when voltaic currents are passed along them in the same direction, the one being positive, the other negative, and the most we can say in this case is that galvanism has the power of producing contractions &c. similar to that which we see manifest in the living body - and hence the rationale of muscular contraction as explained by some, The wires approaching each other when electricity passes along them and the filaments of the nerves

approach each other when the nervous fluid passes along the nerve. But this only proves that galvanism may be substituted for nervous influence and is far from being conclusive. It is but an analogy, and not identical evidence, as the cases are widely dissimilar in their natures. The above and various experiments are considered good evidence in the minds of those who believe in the theory of animal electricity - &c and nervous ^{influence} living stimulus. Other evidences there are but it is not deemed expedient to refer to them as it is not the object to attempt to prove the nervous influence and electricity alike, and do not wish to designate it by the term electric fluid - but nervous influence, or vital force, and the object more particularly is to refer to the force which the system appears to be carried on by and subjected to. This peculiar force is not generated in the brain, or spinal marrow

for factures have been born alive without
either and animals have been known to
live ~~after~~ for hours after breath have been
removed; and that it is no generation
of the nerves we can reasonably conclude
as them are animals so low in the scale
of creation as to be without them.
We must conclude therefore that the
nerves are but its conductor, and the
brain and the spinal marrow its head-
quarter, and organs for its voluntary distri-
bution; and also the sympathetic taking
the primary ~~stand~~ step in subserving
the system it being distributed to organs
whose functions are primary in the frame
of animal existence, — its distribution are
to the involuntary organs and these functions
will therefore be the first to receive the
vital force and the last to lose it, as
we have abundant evidence in every sight
observation. These involuntary functions
being necessary in order to support

the organization which is necessary to
the noble attributes of manhood, volun-
tion, and the power of acting with mor-
tality, and all mental acts. It appears
that respiration is the act, that nervous
influence mostly depends, and by the
oxygen which the blood receives, as it has
been proved by experiment that capillary
circulation, and the action of the heart
depend relatively on the new oxygenation
of the blood. The nervous influence appears
to be generated or collected in the spinal cord
and transmitted by its most perfect
conduction, the nerves, to the brain or
"encephalon cerebri," (including the
sympathetic nerve) and that the action
which is necessary to carry on simple animal
or organic life, and the blue light for the
mind to act with by thoughts, volition
&c, and hence a rationale of mental
and physical exertion - and the relation
existing between them - We see that

The physical labourer is not often his
exertions capable of losing the attention
of the mind, as he would have been to
be our labourer. It is also by this ration-
ale that attempts are made to explain
mental incapacity, and also differences in
many cases in which we see the arrange-
ment of the mental faculties in sick-
ness. It is supposed by our best metaphy-
sicians that a thought produces a change
in the brain, and it is supposed that the
nervous fluid is necessary for the mind
to act as well as the body, and to sup-
port the theory of the atomists that the
mind & matter can be without the
body - Let us recur to a few of the phe-
nomenon in which the mind and body
appear to cooperate or sympathize. We
are all well aware that after eating a full
meal of victuals, we frequently feel an
almost irresistible desire to arouse or
sleep. Let us examine and see to what

principle we can refer it to. The stomach
having received a quantity of food to digest
and this act being an involuntary one as
well as respiration, circulation, &c. It calls
upon the sympathetic nerve for the vital
force or nervous energy to do that act.

The force being furnished, digestion com-
menced and in that acts draws from the
nervous system a portion of nervous energy,
or fluid, or in other words the nervous
energy is not conducted through the me-
dulla oblongata to the brain, but is im-
mediately distributed through the sympa-
thetic system, to the function of digestion.

Thus drawing from the due quantum of
nervous energy, and hence we see the
reciprocity existing between the mental
and corporal energy. The brain not
having its common support does not
furnish means for its common function
the mind - and the mind not having its
common support is not of its common

activities grows obtuse, becomes blunted to arousingness or even sleep itself, and hence the common maxim which is inculcated to spareance rather than throng an empty stomach for a student, And also how difficult to procure sleep upon an empty stomach, Let us go on in reference to sleeping after a full meal and examine this state a step farther, Digestion goes on and as the elements of the food are eat and the oxygen we breathe is the support of the system, it follows that the result of the union, of this newly digested matter will soon manifest itself, and soon it does, Dreaming is now produced, Dreaming being but a minor degree of mental activity to the wakefull or common train of thought. The mind after the stomach receives food first arouses, - Arouses under the activity of Digestion - then as

the elements of the food we eat, and
the air we breathe unite in the blood
a new source for the accumulation
of nervous energy is set into action
with also a less quantity used, and hence
we have a plus what the corporeal main-
tenance requires. The mind requiring the same
stimulus, which the body does for
its support, it is supposed that the
mind makes an effort to dispose
of a portion of this energy by using a
portion of it, (as has been observed to regulate
the disposal of it) by catching at times
originally and hence we have the irregular-
ities of dreaming, which are com-
monly manifested after eating, and
going to sleep on a full stomach.

But we will not pass on to notice or
apply the theory of vital force or nervous
energy more. These statements are
founded but upon theory - with some
facts enough to build a theory upon.

and are not to be considered as supporting
any theory which can be construed into
a fashionable theory of the present day
in Animal Magnetism - as in our
humble opinion, the only theory which
support, animal magnetism is that of
making merchandise of popular
credulity, and practicing only for that
purpose and with that intention. —

Wm^d Eam^d Sparrow,





XXI.

Dissertation
on
Scrofula.

By
John Boardman Trask,
of Roxbury, Massachusetts,
Candidate for a License.



Scrophula

It has been properly remarked by Dr Stokes "That among the catalogue of morbid affections, ranked as it is, to which man is liable there is scarcely one of such paramount importance, of such engrossing interest as Scrophula" Whether we look to the obscurity of its origin, its insidious progress, the number & variety of organs it attacks, or its remarkable intractability & extensive fatality.

It may be truly said that no original temperament, complexion, or frame of body confers complete immunity from this disease or yet some individuals possessing certain characteristics are more subject to this malady than others. Strumous persons often present the look of florid health & a full, robust, but on strict examination the soft parts are found soft & flabby & they easily shrink away under fatigue, privation, or disease. But when the operation of these causes are removed, such persons soon again acquire their former phlegmatic habit & condition. The Strumous habit is a habit of debility.

It is characterised by a want of stamina & enduring tone. Considering the various organs attacked by this disease, & the multitude of forms in which it may present itself we still have narrower circumscription. It would be a difficult & we might say almost endless task to describe the peculiar characteristics of this diathesis, as a brief view of some of its features will present.

Commencing with the common integument, we find a variety of eruptive diseases distinctly referable to this habit, as in 3 of the forms of "Verrucae", warts & forms of "Eczema". There likewise in their chronic forms may be easily

enumerated, it doubt if we are entitled to any inference from the fact that
the tuberculous matter is found deposited in the interior of these eruptions. Their
treatment & cure is that of scrophulous generally & yield more readily to their treatment
than any other, Eruptions of this description when they attack the ears, scalp,
& face often cause swellings of the lymphatic glands of the neck & also
sub-lingual, & sub-maxillary glands these often become permanent from
the deposition of tuberculous matter, other diseases of the integument might
be mentioned as illustrations were it necessary.

In the 2nd place spots more deeply seated than the skin become involved
as the absorbent glands, & which are considered the most unequivocal evidence
of the existence of Strumae, excepting the discharge of tuberculous matter.

The sublingual & sub-maxillary are often the seat of this disease but the parotid
I believe more rarely. Often the tongue exempt from its devastating
ravages, assuming in its milder form that of simple Aphthae, or rounded
knobs or nodules slightly imbedded in this organ, at others the mucous membrane
becomes red & prominent finally bursting in the centre followed by ulceration
& often sloughy erosion, giving rise to much pain, profuse salivation
hoarse breath, & fever. Again the mucous membranes of the fauces, & uvula,
nostrils & throat are often severely attacked, appearing in the form
of small blisters, or excoriations, & this without the presence of Aphthae
or the presence & existence of mercury. The genital membrane is
often attacked, this membrane easily irritated, the secretion of mucus

is consequently augmented, it is at times becomes acrid, inducing ultimately a form of eczema. If the progress of the disease is not arrested the fine long lamina within the nostrils become denuded & ultimately necrosed, thus producing the offensive odor so characteristic of this disgusting malady. Cramp, stinks often as a consequence of this disease as is fully illustrated in children of a stercorous habit. But the ultimate termination of the respiratory membrane is frequently the seat of this disease as Dr Allison informs us he has frequently found tuberculous matter in the cavities these minute cavities being half full with it.

The digestive mucous membrane is throughout its whole extent the seat of this disease, & its intestinal portion is particularly liable to serofulous transformation, when this occurs a feeble action of the stomach is always present, & a torpid or windily irritable state of the membrane of the canal. It is the opinion of a distinguished professor of this institution, that this is frequently & undoubtedly the cause of that almost intractable form of chronic Diarrhoea so often met with in children during the summer season & this opinion is borne out by the testimony of Louis who states that in 350 autopsies he found tubercle in one third of the whole number in the small intestines & one ninth of the remainder in the large. The Spleen & Pancreas are also involved but most frequently the Mesentery. It often attacks the female organs of generation, exhibiting itself in a most obstinate form of Leucorrhoea producing languor & debility, & checking menstruation. The morbid discharge

is interrupted on the recurrence of the menses & is increased in quantity before
& after this occurrence. Another organ the seat of this disease is the mammary
occurring before, but more frequently after „puberty“. This disease is easily mistaken
for carcinoma, it has I believe some distinctive characters viz. In carcinoma
the gland is contracted & the nipple retracted: the tumour a nodulated & stony
hardness, In sarcoptosis enlargement, the nipple is more natural, the gland
enlarged, the tumour is tender & yields to pressure & appears more elastic.
It is this form of disease probably so often cured by Cancer Quacks

Strumous Otitis is another form in which it occurs, & according to some
estimate the proportion at 94 per cent. The organ of hearing as well as sight is
subject to its ravages, occurring in the form of Strumous Otorrhoea this is frequently
a cause of early deafness, attended with fever though this of itself would not ~~of itself~~
~~indicate~~ curies of the os petrosa which in some cases follows, proving
fatal. The synovial membranes are more likely to take an diseased action
generally in Strumous habits than others, It makes its attack at times on
the bones, & more particularly their cancellous structure & according to Brodie
tuberculous matter is often found in this structure, Not only the bones but
their investing membrane is subject to this disease, giving rise to inflammation
suppuration, detachment, & ultimately to necrosis, or absorption of the osseous matter
& a foreign deposition in its place of disease call osteosteatoma.

Another point of attack & disastrous in its consequences is the spinal column
& the intervertebral cartilages, the bones become soft & at times partially absorbed

think yellow cheesy matter is deposited curies hollows & the spine indignant to the support of the body yields to the superincumbent weight at an angle more or less acute. If the disorganisation is extensive, the membranes, medulla, & nerves must as a consequence suffer, & I would not imply that in all cases of spinal curvature, curies of the spine & the vertebrae are the consequence of the disorganisation, for it may arise from a debilitated & relaxed state of the ligamentous & muscular system in particular, then to any softening of osseous texture. For were this the fact in every case of curvature, persons would be affected?

The serous membranes are also the seat of this disease as is demonstrated by the formation of tubercles on their free surfaces.

It finds a local habitation & a place in the most important of all the organs of the system, the symptoms simulating those of acute Hydrocephalus at times & at other those of chronic inflammation & at other times they may exist yet no symptoms mark their presence. It is an acknowledged fact I believe the children of strumous parents are more liable to cerebral diseases than others.

Modern Pathology has demonstrated the fact of its occurrence within the cerebral organs of the nervous system. The lungs are particularly liable to Strumous deposits.

The effect of Strumous in modifying the symptoms of disease is conspicuous as an illustration we may mention Inflammation losing the acuteness of its character, becoming stazy & indolent & difficult of cure, requiring a long & tedious course as its accomplishment.

The great sensitiveness of Strumous persons render them more liable

to Insens of the nervous class than others & according to Dr Clyne in such cases it presents itself in more formidable features than in persons of a different habit, Epilepsy, he says is more frequent & aggravated in persons of this description, Insanity is also a consequence often of this disease to a greater or less extent, & as an elucidation of this point we may give the opinion of an eminent physician in the treatment of insanity, who states it as his belief, "that one half of those recovering under mental derangement are of a stramens constitution having some manifest indication of its existence in their persons."

With this brief glance at the various forms in which this disease presents itself we pass to its causes, General Diagnosis, & treatment.

Causes There to say the least are occult. The opinions of writers have been as numerous & various on the causes of this disease, as the various phases of the disease itself. It is a law of Philosophy to simplify & to duty of the physician to apply this law in the investigation of causes, treatment, & effects of disease, for the fewest causes that will rationally account for the effects presented is always best, when we step beyond this, that which is now abstruse becomes doubly more so.

It was the opinion of Cullen, that this disease depended on a peculiar condition of the Lymphatic System, as one of the most frequent is an enlargement of these glands, & the frequency & almost universality of these symptoms have induced physicians to suppose scrupulously as

depending on morbid affections of this system, But this seems not to be the
fact, as many other parts of the system having little of a glandular
structure are often the primitive seats of this disease, Carmichael again
supposed it generated & arising from disorders of the Digestive system
but this opinion seems ill founded, from the fact, that derangement of
the Digestive functions is more or less induced as a consequence of this
disease attacking parts remote as the parts themselves, It is as well, as I
believe at the present day that derangement of those functions more usually
follow as secondary effects of this disease. Others again of more recent
date ^{ascribe} ~~ascribed~~ it to a predominance of the white tissue of the liver, & regard
it as nothing more than a chronic irritation of those parts & the organs
directly connected with them, Arrest of development is the favorite
theory of another class, & as a consequence of this arrest, sup. the individual
as possessing a lower degree of vitality, & approximating the class of so-called
Morbid animals, This would seem to place persons afflicted with this
disease below the common level of mankind both in physical & mental
powers, Such a theory to say no more of it, to me appears absurd,
the authors of such theories seemingly aware of their lameness throw
inordinate development on some organs, & in a proportionate degree arrest
it in others, Thus Hypertrophy of the Liver follows as a natural consequence
whether from performing the incursive office of another organ or from
any other cause, I don't know that Hypertrophy of the Liver should be

considered as the cause of this disease than that it is great or brain it is not likely
to follow from any other cause, I believe. The law of cause & effect seems in a
measure forgotten by some when applied to the government of the principles
of the animal economy in a state of health or disease. This law of cause & effect
development of diseases is illumination would reduce the of mankind to
ignorance in being as well as doing, to admit this law would be to admit that
a large proportion of children born at the present day are but so many specimens
of human monstrosity, which to me appear unaccountable & extremely
gratuitous. In considering the cause of a disease so deeply rooted in the
human constitution as scrophula is acknowledged to be, it would seem
necessary to direct our attention to circumstances remote in the history
of those who are its subjects. There is little doubt but that the foundation
of scrophula is often laid during the foetal state, & nothing is better
established & believed by the result of observation than the hereditary nature
of this disease, this peculiarity of constitution seems to be communicated to
the fetus by some defect of energy in one or both of the parents, arising
from extreme youth or very advanced age, or great disparity of age, or
by a life of dissipation, or from debilitated states resulting from
protracted illness or imperfect nourishment & various occurrences during
gestation, as fright, grief, mental distress, & all these causes affecting
embryonic existence, impeding the constitution by entanglement, which
if not identical with Struma, leads to its development from causes

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wholly inadequate under other circumstances to produce it. It is observed
to originate in the really opposite of heat, "colds," the causes then, in
line to it here, are habitual exposure to cold & damp, privation of free air
& light, scanty nourishment & want of healthy exercise.

A moist cold & variable climate, is particularly favourable to ^{the development of} this disease.
A very cold or hot climate serves rather as a protection against it. The former
by inducing, invigorates healthy exercise & digestion, & thus strengthens the system.

The other favouring exertion particularly the skin, & preserves the body from
those sudden changes so often the foundation of this disease. But when persons
born in a warm climate are removed to a cold one the disease is of frequent
occurrence, as is exemplified in the African race, in whom the disease presents
itself in its most violent forms. This fact is I believe sufficiently attested
by numerous writers as Dr. Ferguson in the cases of the black people of the
West Indies. Among other causes many is remarkable that of scolding
children by hand & of nursing them too long both of which may lead
to the same result. Another & a fruitful source is confinement, in ill
ventilated apartments, for the deficiency of pure air cannot long be endured
during youth without injurious results. While the constitution, is acquiring
that character which is to distinguish it through life all the processes of
the economy are peculiarly active, & an absence of any principle that
to perfect the animal fluids, & give force to nervous power, must prove
highly injurious. The aired apartments usually have little light & the want

of this influence may form a predisposition to its development in the human
body. Little less, perhaps other plants require a certain amount of light for the
performance of its functions. Have we not examples of the growth of
of light in the development of this disease among the inhabitants of cellars &
& narrow alleys where sunlight never enters, Animals, says Dr. Macleod,

in such circumstances will exhibit unequivocal evidence of tubercular
regeneration & why under similar circumstances may not man

I consider the disease as having its origin in debility, coupled with a
tendency to the formation of tubercles, this tendency is secondary

induced from the previous debilitated state. This specially depressed state of the system
cannot exist I conceive without debility preceding it, It is not the tendency

is your remedy directed to this end, why do you attempt to support the system by the
use of Tonics & at the same time induce a new action in the system by blisters

Here are the practitioners of the present day who apply the rigid system of regimen
& rebellion to the scrupulous inflammation that are adapted to ordinary phlegmasia

But it is the sequel of other disease is I think in many cases beyond doubt
it is from the debility induced from the disease, How often after the termination
of various diseases are parents heard to say, "that their children they believe, and
never recovered fully from the effects of this or that disease,

When the physician is called he finds the thoracic cavity fully developed, he forms
his diagnosis accordingly, & there are no marks by which he can trace
the origin of disease from its parent, now is he to account for the

unmelancholic affection when interrogated as to its cause, on any other principle more rational, consistent, or simple, than that of debility induced by previous disease coupled with a depressed condition of the whole nutrient system as an effect, the case has remained in the same condition since the termination of a disease (who was otherwise healthy preceding it) & a stramonium Diathesis, presenting itself in this condition seems to favour this idea. Nor is this instance isolated, it is I think borne out by the testimony of analogous circumstances & cases.

It is a well known fact, that long mecthing, protracted anxiety of mind, close study, dissipation, even in sexual indulgence, all of them causes of debility, & all of them favour the development of Struma.

In Struma there is invariably a diminution of the plastic element of the blood a deficiency in its fibrin, & when this exists, remarkable modifications are induced in its physical characters, When this pathological state is present an almost universal prostration of all the powers of the system is present, as is peculiarly illustrated in our typhoid & typhus fevers, & a singular coincidence exists says Mr. Keating in the blood of a typhus patient & that of a Strumous habit.

Diagnosis

The Strumous constitution is often indicated by a fair complexion, light hair, long eyelashes, large nostrils & often blue eyes, & red spots on either cheek a dusky or red skin, which is smooth & easily irritated.

Children who possess this habit are often feverish & irritable, a slight irregularity of diet, or exposure to cold & moisture after indulging in white & sweetened The mucous membranes of the Stomach like the common integument being often very delicate, in their texture, their vessels readily give way & thus the same frequent hemorrhages, & other persons have a more stomach & urinary organs, Lungs &c. &c. In such persons the mucous secretions are more abundant, & often acid, the membranes themselves become thickened, & since arise excoriations of the lips & nostrils, which become chapped & swollen, thus the half open mouth so common a characteristic of Struma is probably owing to the partially obstructed state of the nasal passages, Most persons of this habit are of small stature, but this sign means is a general rule as it exists in persons of large stature & fine symmetry of form.

The more intellectual characteristics of strumous are undoubtedly more in evidence from this constitution.

The mind in such persons is always quick & irritable, the passions & desires about the perception is keen & the imagination predominating over the judgment, & the mind like the body exhibiting a want of equilibrium & sagacity. There are sometimes some peculiar expressions of the mind as in some persons who are very sensitive to cold & heat, & to the action of the stomach & the bowels.

In a second class of persons we find very different appearances, persons who are not so much affected by the disease, & who are more moderate in their nervous energy as needed, the feelings are more in such persons as in

functions of the system are performed in a sluggish & imperfect manner

Struma difficult of cure, becomes more unmanageable, in persons of a cold
complicated with a torpid temperament, & the disease occurs as often in persons of
this description as it recedes. As before stated the various forms in which the
disease occurs, & the various organs affected by it, the consequent variety of symptoms
presented, renders it extremely difficult as a consequence, to form a definition
that should be at once accurate, & comprehensible. But the most certain evidence
of the existence of Scrophula, is the production of a soft, brittle, unorganised,
matter, resembling cheese somewhat in its physical appearance, & which may be
mixed with the matter of abscesses, or deposited in rounded masses, in some of the
natural cavities & canals of the body, or at times in cysts, or diffused as if by
infiltration through the natural texture of a part. To this the name of tubercle
has been given or tuberculous matter, although the existence of this matter is
sufficient evidence of the existence of Struma, yet it does not invalidate the
fact that Struma cannot exist without it. I regard it simply as evidence of the
existence of Struma & at the same time a result ~~of the disease~~ of the disease, furnishing
no evidence as to the cause. Of the peculiar & intimate changes of the fluids
& solids of the system & their specific relations to each other, in giving rise to the
formation of tuberculous matter little need be said for little is known
as we are in possession of this great secret, that approbrium of medical science
throughout the civilised world, agrees in the opinion that the disease is
the great disease, & of opinion among writers of eminence on this subject

important subject, there are but two possible cases, either again
in every case to inflammation, others as strongly asserting that in no instance
is it dependent on inflammatory action. There are discrepancies among the various
theories of the disease, some of them of great practical importance, how is
the physician to decide upon a correct measure to adopt? It becomes a
disposition of disease, how is he to come at any definite conclusion

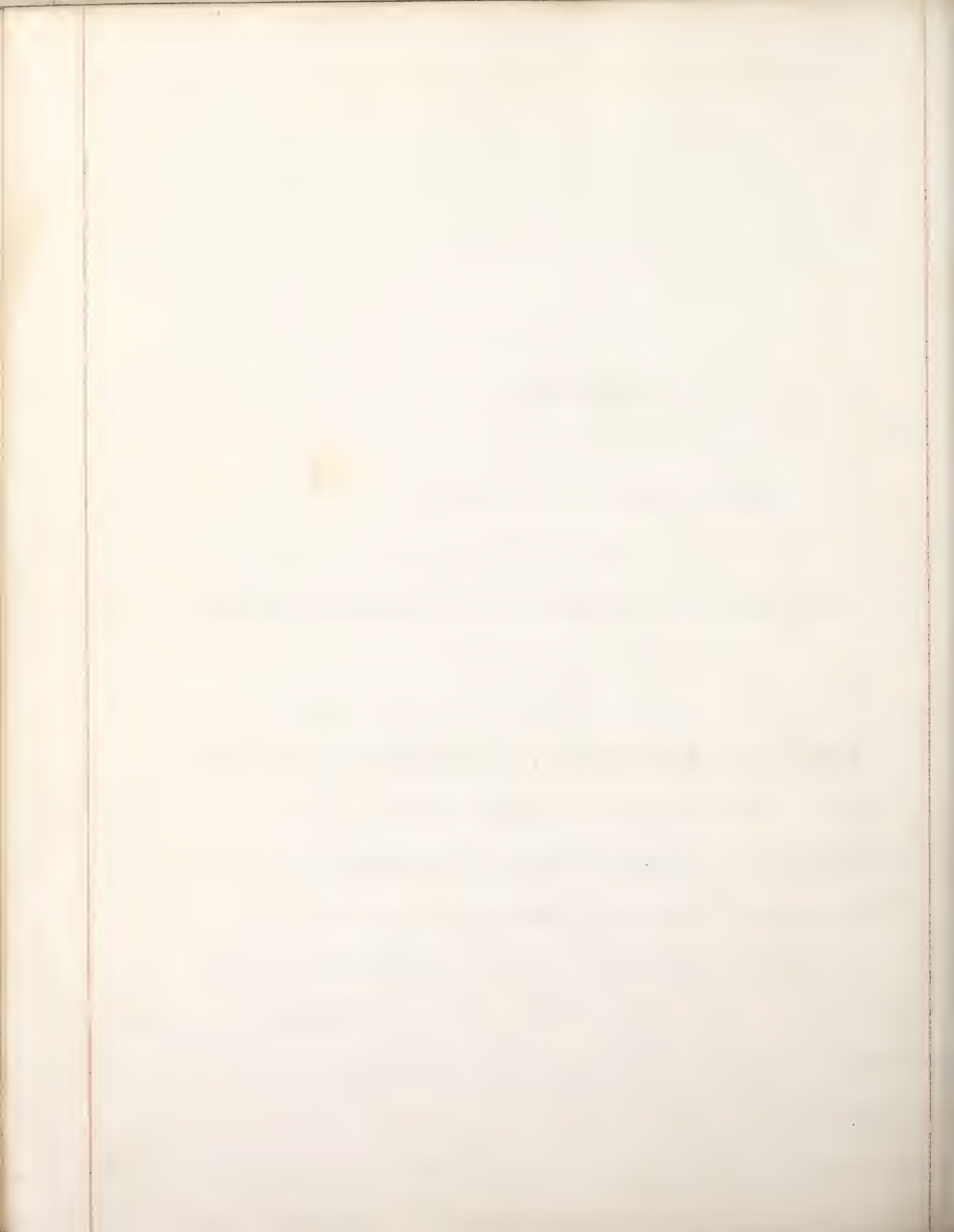
He is thrown upon his own resources & must strike out a path to follow as his own
judgment may dictate is it correct or incorrect. From the facts, presenting
various individuals we have but few conclusions

The first is, that Tubercle has & may exist where no symptom of inflammation
before or after death, The second is, that it has & also may seemingly
connected with the presence of inflammation, & as inflammation does not invariably
produce Tuberculosis is sufficient evidence, that something more is required.
That it may be an occasional cause I will not dispute but, the only in-
teresting predisposition, The facts attacked vary at different periods of
life, Thus in children there is a tendency to implicate several organs at
once, while in the adult the greater tendency is to locate on some one organ
& this more particularly the lungs. If we take a more particular survey
of the strumous constitution, we find the Digestive functions in rarely
well performed, that the bowels are irregular in their action & more
or less in a state of debility, that the secretions are not of the nature &

XXII.

Dissertation
on
Cynanche Trachealis.

By
John Luman Wakefield,
of Winsted,
Candidate for the Degree of Doctor in Medicine.



Cynanche Trachealis,

Gentlemen - as in writing a thesis it is not my representation to enlighten the minds of the profession I shall not attempt to advance any theory of my own in regard to the disease which I have chosen, but proceed at once to state briefly as may be what I believe to be the generally received opinion concerning the nature and treatment of the disease in question. The disease which I have selected is known by the several names of Trachitis, Croup, *Stis* & *Cynanche trachealis*. Authors make two varieties, the genuine & the spurious or bastard Croup. I shall speak only of the former. This may be said to be a disease peculiar to children occurring more commonly between the time of weaning and the period of puberty, although it may occur during the first year or in fact at almost any period of life. The majority of cases however occur during the second year. This disease is essentially an inflammation affecting the mucous membrane of the trachea & extending at times into the minute ramifications of the bronchial tubes accompanied by an albuminous exudation into their cavities which becoming concrete constitutes what is called a false membrane.

or the membrane of Croup. In some cases however we do not find this membrane, neither see the disease terminating in the secretion of a mucous-purulent matter of an opaque yellowish appearance or in a copious secretion of a viscid frothy mucus. These different terminations are supposed to depend upon the degree of inflammation present, the false membrane attending those cases in which the inflammation is at the highest grade. This membrane varies in its extent in different cases, being sometimes found in the larynx alone at others in the trachea & bronchial tubes & occasionally extending from the larynx to the minute ramifications of the bronchia.

Symptoms— This disease varies in the manner of its approach sometimes attacking the patient suddenly without any preliminary symptoms and acquiring the utmost degree of violence in the course of a few hours, at other times and I believe more generally it is preceded by symptoms of a Catarrh of Rhinæ or the child has what is commonly called a cold accompanied by sneezing cough and hoarseness being at the same time feverish and restless.

These symptoms may continue for a day or two when the signs peculiar to Croup become manifest, there are great difficulty of breathing, cough of a rough

bartering, ringing, kind with sonorous inspiration. The voice at the same time becoming very hoarse. The febrile excitement increases and all the symptoms acquire in a short time an alarming degree of violence. The face is flushed. Pulse frequent, tense & quick. Eyes injected & heavy, the skin dry & hot & respiration extremely difficult.

These symptoms usually make their appearance during the night and then we have a remission and an exacerbation with increase of symptoms on the following night.

As the disease advances the respiratory function becomes more & more impeded & the blood ceasing to be duly arterialised, the skin grows dusky, pulse feeble & irregular & the extremities cold, the cough loses its loud ringing character becoming hoarse and inaudible at a short distance.

The voice becomes whispering & sometimes suppressed, the head is thrown back, face livid & often bloated, nostrils dilated, & in short all the symptoms of suffocation are present. When the foregoing symptoms exist the case usually terminates fatally. Although occasionally after all these the patient by chewing off the albuminous secretion may recover.

Diagnosis - The principal diagnostic marks of the disease are the peculiar sounds of the breathing, Cong. & rattling voice & when it is far advanced we may distinguish it from disease of the lungs by the intercostal spaces being well filled in breathing & by the sounds on Percussion. It may also be distinguished from Spasm of the Glottis and hysterical affection by fear being absent and the general history of the case.

Causes - The causes are said to be eating indigestible articles of food & exposure to cold & moisture. This last is undoubtedly the principal cause of the disease. All milers I believe agree on this point, that those children who live by the water or who are exposed to cool damp air in any way are much more liable to suffer from this affection than those who are not similarly exposed. Thus it is we see the disease prevailing generally in the fall & Spring. Now particularly in the Spring when the snow is being thawed. Sleeping in cold damp apartments is very liable to bring it on in young children & to be brief exposure to cold & moisture in whatever way in comes is v. liable to produce the disease.

Prognosis—Cyanotic Stachentis is a disease which may well excite the alarm of the friends & parents for at best the prognosis can be but doubtful.

formerly it was said that four ^{at} of five attacks within the disease dies but owing to the improvements in the treatment of the affection the number of recoveries is now said to be ^{at least} equal to the number of deaths.

We can judge of the probable issue of the case only by the apparent Circumstances and progress of the malady.

The prognosis must of course be gathered from the general Condition of the child. If the respiration come on and the difficulty of respiration in a measure subsides while the strength of the patient remains unimpaired we may venture to hope for a favourable termination. On the other hand if we find the lips becoming blue, the skin cold, & the pulse feeble, & thready, with a tendency to Coma we have good reason to consider the case as past the reach of Medicine, the mortality of course will vary according as the disease is detected early and treated thoroughly or otherwise.

Treatment—

There is no specific remedy for this disease. It is always found necessary to put in force the general principles upon which the treatment of inflammation is founded, adapting them of course to the particular case and attending circumstances.

The physician should always be on the alert and as soon as ^{of the preliminary} any symptoms manifest themselves he should adopt some measures which may have a tendency to prevent the development of the disease. The patient should be carefully guarded against all circumstances which may ~~have a~~ likely to excite or increase inflammation. He should be kept within doors & put upon farinaceous diet and the function of the bowels and skin particularly attended to. In this way undoubtedly attacks of Emp may be frequently nipped off, but if in spite of these precautionary measures the disease becomes developed, accompanied 'as it usually is' by all the symptoms of high phlogistic action the treatment must be prompt and efficient. The principal indication is to make a thing improper on the system & remove if possible the ^{existing} inflammation. The remedies upon which most reliance is placed to answer

This indication are tantamounts antimony, Calomel & blood-letting. If the Patient be plethoric and the Physician called early blood-letting should I think be unhesitatingly employed. this may be done either by Cups or leeches. leeches however are to be preferred in very young Children. the number to be applied depending upon the age, and Constitution of the Child.

After efficient venesection other remedies, as Emetics, laxatives &c must be resorted to. The effects of an emetic in this disease are often very striking, it promotes respiration and detaches to the surface often frequently cutting short the disease at the onset.

When venesection is employed it is always advisable it should precede the emetic as it will assist it in its operation & likewise be of service in lessening the danger of Strains & Congestion of the vessels of the brain during the straining efforts of vomiting. As an emetic tart-antimony is preferred, as acting more powerfully, and its action being of long continuance, having also a more direct anti-phlogistic tendency than any other emetic substance, after this a grain may be dissolved in an ounce of water and kept upon full grain every fifteen minutes till

Vomiting occur, & this to be followed by full doses of Calomel every three or four hours, at the same time continuing the antimony in sufficient doses to keep up a degree of nausea. The warm-bath also is found to be of great service in the hot stage when the face is flushed and the pulse quick and the respiration is difficult.

The infusion of warm water into the head and a sponge filled with hot water applied to the throat will often give great relief. Blistering is recommended by some, but if used it must be with caution. In the latter stages the stimulating expectorants are useful.

These I believe are the chief remedies upon which much reliance is to be placed; If after a thorough trial of these remedies the disease should continue, & prognosticate a fatal termination and signs of approaching dissolution appear the question of tracheotomy as a last resort will arise. This operation I am aware is seldom attended with success, but when it is manifestly the only chance left for the patient, as it has occasionally proved successful I should not hesitate to perform it.

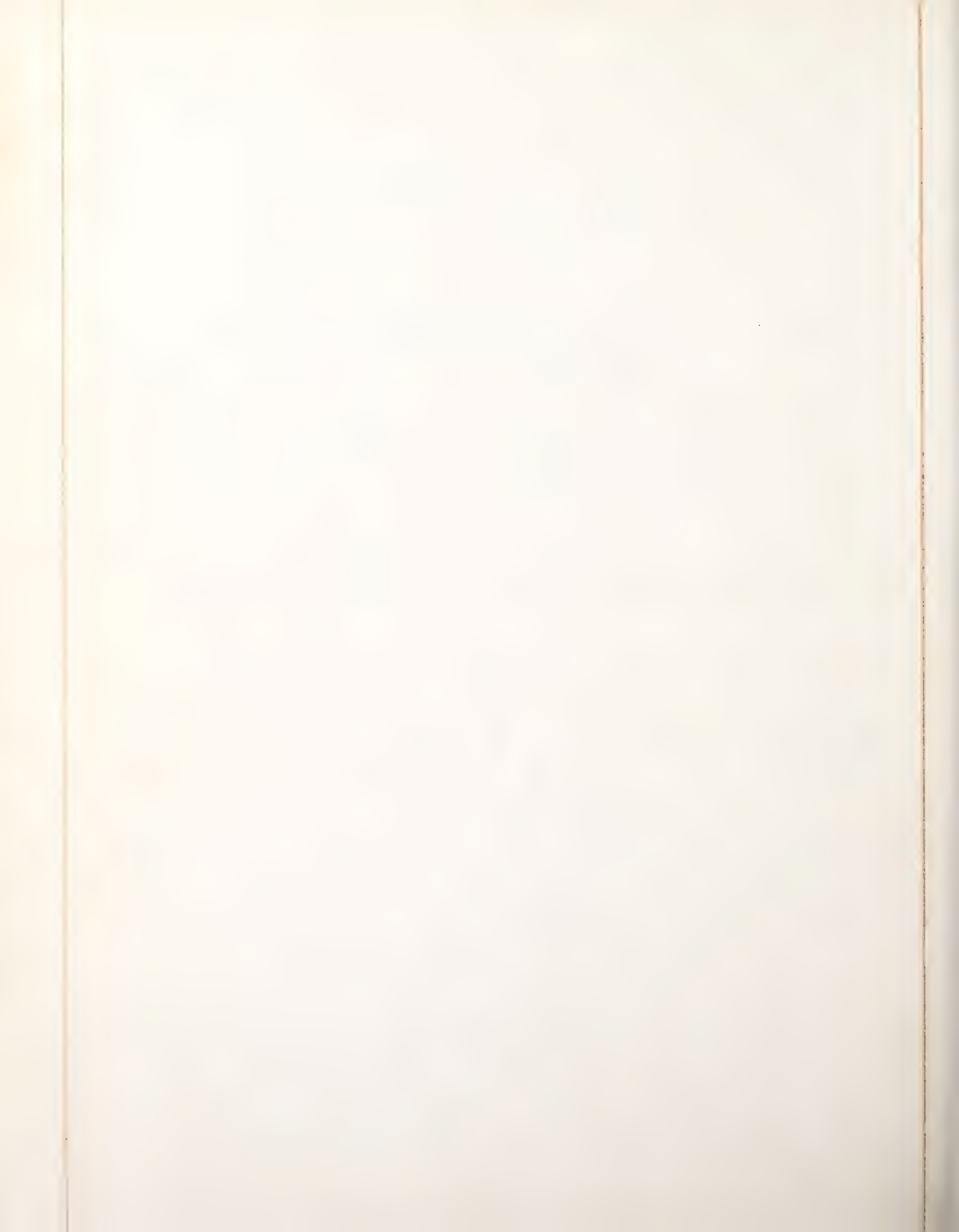




XXIII.

Dissertation
on
Pulmonary Hemorrhage.

By
William Henry Williams,
of Clinton,
Candidate for the Degree of Doctor in Medicine.



Gentlemen — Pulmonary hemorrhage its cause and treatment is the subject which I propose to briefly consider. It is divided into primary or idiopathic and secondary or symptomatic. In the primary there is no rupture of a blood vessel but the hemorrhage takes place from ten thousand minute points upon the surface of the mucous membrane lining the bronchial tubes or air cells of the lungs. But in the secondary the blood may be exhaled from these minute points or it may be poured out from an opened vessel, an artery or a vein.

The instances of pulmonary hemorrhage that have been proved strictly idiopathic are very rare. We have but few cases stated in our books of this kind. The story told by Pliny of the Roman governor who suffered habitual hemoptysis but who lived to the good old age of four score years and ten has



been often cited as an example of idiopathic hemorrhage from the lungs. "It" says me writes "the frequent citation of this supposed instance is of itself a sufficient proof that spontaneous pulmonary hemorrhage is far from being common."

Some physicians however seem to regard it as not very infrequent. They think that persons who have been subject to epistaxis or nose bleed in early life are sometimes attacked with hemorrhage from the lungs at a subsequent period. Others again think that almost every instance of such hemorrhage is attended by organic disease of the lungs and is merely symptomatic and they base their opinion upon statistics not mere conjecture. Still I think it may occur as an idiopathic affection. Certainly it may occur without any disease either of the lungs or heart. I know of an instance of this kind. A gentleman of a little 30 yrs of age who had been subject to attacks of hemoptysis died in one of them during the last year. In dissection his lungs were found free from disease there was no disease of the heart in which there was no disease found in the viscera of the thorax or any thing that looked like it except a small adhesion of one lung to the chest there was not a pleurisy he had when a boy.

There is a form of Pulmonary hemorrhage which is considered as holding a kind, middle way station between primary and secondary

It is vicarious and is usually of the menstrual discharge in females
Some have strongly doubted the existence of this form. I heard a
physician of the City Hospital of New York who has paid a good share
of attention to diseases of the chest and who has ample opportunity for
prosecuting his investigations say that he had never met with a case
of this kind that he had inquired of the oldest physicians in the city and
was told they had not. He thought the statements of such cases in our
books were incorrect. But there is a case stated in the published lec-
tures of Dr. Watson in which it seems there can be no possibility of mistake.
He quotes it from Pinel. The history of it is as follows

"A female 58 years old born of healthy and robust parents of strong
constitution of a sanguine and plethoric temperament and of great
sensibility lived in the Salpêtrière & was therefore under constant
observation from the age of 14. She enjoyed excellent health till she
was 16 yrs. old. At this time the menstrual discharge commenced
without difficulty; but this her first menstruation was suddenly sup-
pressed by fright at the sight of an epileptic in strong convul-
sions. ^{her catamenia} From that time never ~~reappeared~~; but at the time
when her next regular menstruation should have come on she was at-
tacked with violent hemoptysis and with one exception only she con-
tinued to menstruate regularly through her lungs till her 58 yrs. a pe-
riod of 42 yrs. She continued plump and otherwise healthy."



This case proves undeniably that it has occurred in one instance and if in one way it may have occurred in several. (Probably it does occasionally take place.

2nd Primary hemorrhage from the lungs the cause may be a general plethora of the system. Primary hemorrhage sometimes happens to those who ascend very high mountains in consequence of the diminished pressure of the atmosphere. It happened to Humboldt and his companions in one instance when they had reached a very great elevation.

The most common cause of secondary hemorrhage is organic disease either of the lungs or heart usually the former. Phthisis pulmonalis that frequent and fatal disease is almost invariably attended by pulmonary hemorrhage. It is sometimes the first indication of this frightful malady and very often the first symptom that alarms either the unfortunate patient or his friends. There are two ways in which tubercular disease of the lungs which is phthisis causes hemorrhage. The tubercles by their presence in the delicate tissue of the lungs excite congestion of the vessels till it can no longer be borne and then the blood is poured out upon the mucous membrane of the air cells and bronchial tubes from an innumerable number of points constituting what is called the hemorrhage.



of expectoration. It is an effect of nature to unload the over distended
veins and if not very copious and does not do the lungs in long
injuries. But it may be very profuse and then the life of the
patient is sometimes in immediate danger. It is attended with
cough, febrility & rapidity. The blood is sometimes spured out from
the serous membrane in this way; it may be so rapid that
if prompt and efficient treatment is not adopted the patient
may die almost immediately. This is the usual form of
hemorrhage in phthisis; but sometimes in the progress of the
disease a blood vessel gets laid open and then copious & very
likely fatal bleeding ensues. This is a rare occurrence because
in the formation of the cavities or caverns, sinuses as they
are called the blood vessels are subjected to pressure and
inflammation which usually renders them insuperable to some
distance from where they are divided by the disease. Tubercles
may by the mechanical pressure which they make upon
the blood vessels cause hemorrhage. By impeding the flow of
blood through its proper channel they may cause congestion &
distention till it ends in hemorrhage.

Next to the tubercular disease of the lungs as a cause of pul-
monary hemorrhage is disease of the heart impeding in some way
the return of blood from the lungs. When produced by this cause



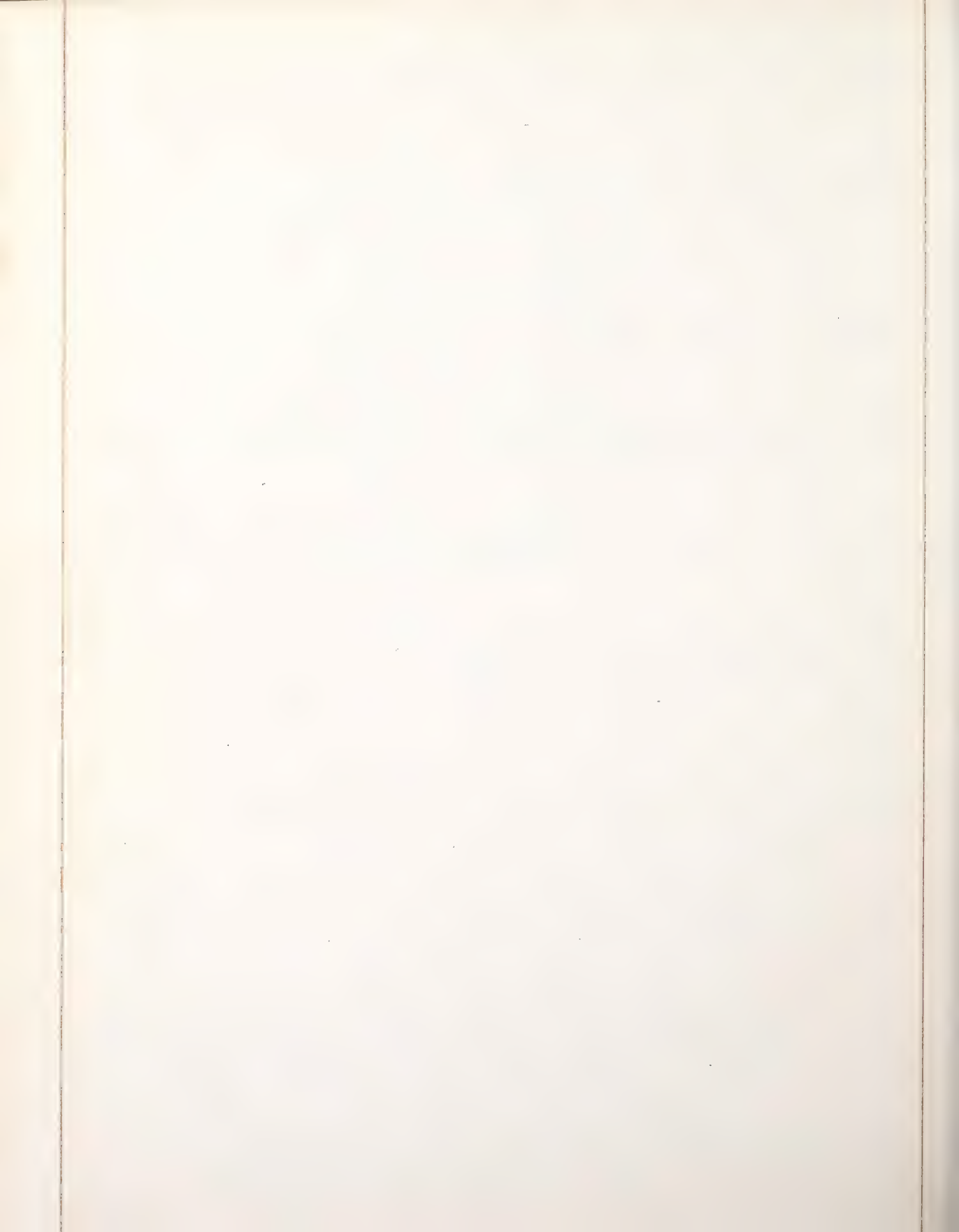
The derangement is in the left chamber of the heart. It can not be in the right since any obstacle to the free passage of the blood here would directly tend to diminish the quantity of blood sent to the lung and induce congestion of the liver and system of the vena porta. It has been stated by some that the disease was usually in the right side but common sense and the facts developed by dissection are altogether against this doctrine. The peculiar condition of the left chamber causing pulmonary hemorrhage, may be either hypertrophy with ossification of the valves of that side or there may be simple hypertrophy. There is one state of the lung which is sometimes met with where the bleeding is caused by cardiac disease that is called pulmonary apoplexy. It may occur when there is no disease of the heart but this is the principal cause. There are two forms of this the diffused and the circumscribed or tubular. In the first a considerable part of the lung perhaps the whole of one lobe or more is found filled with dark coagulated blood. The blood may have been forced out by exhalation and filling up the air vessels has coagulated there. In the second or tubular form when the lung is examined after death a number of compact masses ^{are found} situated here and



there in the substance of the lung chiefly towards the lower lobes. These masses are somewhat globular and vary in diameter from half an inch to two or three inches. They are of a dark color and are formed by the coagulation of blood in the pulmonary vesicles of the lobules of the lung. These lobules having no communication with one another but being enclosed in a sort of membrane each with its own branches leading to it give origin to these distinct masses.

It is thought and with good reason perhaps that in this form the hemorrhage takes place from a bronchus and in the effort at respiration a portion of the blood may be carried forward toward the trachea but a portion of it is carried backward into the lobule to which the bronchus leads by the rush of air towards it. In this manner the blood may lodge itself in the pulmonary vesicles & preventing the entrance of air coagulate there. Perhaps this is the only satisfactory explanation of the fact that distinct lobules scattered about in different parts of the lung are thus found filled up. Sometimes the lung is found broken down in a manner similar to the substance of the brain in cerebral hemorrhage.

Pulmonary apoplexy is only a consequence of pulmonary hemorrhage. The blood is first poured out of its natural channels and then following the course described it causes the condition we have been considering. It is sometimes seen after death from phthisis where there has been



considerable hemoptysis.

The symptoms attending the two forms of pulmonary apoplexy are somewhat different. In the lobular or circumscribed form the hemorrhage is often profuse; but in the diffused it is commonly slow and gradual.

There is one cause of hemoptysis that should ^{not} be passed by though it is exceedingly rare. It is the rupture of ^{an} aneurism into the lungs. An aneurism of the arch of the aorta or some of its branches does sometimes burst and pour its contents into the lungs.

Hemorrhage from mechanical injury to the thorax is not an infrequent circumstance but this I do not propose to consider. In common pneumonia there is usually a slight oozing of blood from the vascular membrane but I am not aware that is ever any thing more. The blood is only seen mingled with the mucus expectorated just enough to give it a little color.

When blood is discharged from the lungs it is always a serious affair and should receive the closest investigation. It is not usually alarming so much because it immediately endangers life (although it does sometimes) as because it indicates in most cases incurable disease. I believe the doctrine that it caused the deposit of tubercles in the lungs and consequently phthisis, is now pretty thoroughly exploded. It is often



a consequence of that disease but a rare one. Aside from the cases of hemoptysis from mechanical injury to the thorax & of vicarious hemorrhage probably nineteen hundredths of the cases or as some would say ninety nine hundredths are caused by organic disease in the lungs or heart.

A person predisposed to anything which hinders the circulation will tend to produce it. Violent exercise of any kind straining loud speaking shouting or singing playing a wind instrument or any thing in which the lungs are taxed tends to over tax the lungs.

I have used the terms pulmonary hemorrhage and hemoptysis as synonymous but they are not. The first is simply an effusion or rupture of blood into the lungs the latter is something more; it is the discharge of that blood from the lungs. Hemorrhage may occur without hemoptysis but hemoptysis can not occur without hemorrhage. They hold the relation to each other of cause and effect.

The quantity of blood lost varies from a very small quantity to such an amount as destroys the life of the patient at once either by suffocation or syncope and between these extremes there is every variety of quantity.

The diagnosis in cases where blood is spitted from the



mouth is not always an easy matter. It may proceed from the cavity of the mouth more stomach or lungs. It is however between the last two that it is most difficult to distinguish. When from the other parts mentioned an inspection of the parts will satisfy us as to its origin. But the color of the blood or the sudden discharge of it or the presence of cough at the time will not enable us to determine whether it is hemoptysis or hematemesis. There are certain symptoms that will usually enable us to form a correct diagnosis. In hematemesis is preceded by some disturbance in the region of the stomach, a sensation of oppression and weight in the epigastrium and by nausea. It is more frequently than hemoptysis preceded by paleness of the countenance a partial loss of sight and a tendency to syncope. On the other hand the precursors of hemoptysis are dyspnoea, cough, a tickling in the throat and a sensation of bubbling in the thorax. Usually before a copious bleeding from the lungs some sputa are coughed up containing more or less of blood. Copious hemorrhage of this kind usually goes in or in a succession of months while in hematemesis it may all be discharged at once. When from the lungs it continues to be coughed up in gradually diminishing

quantities for a considerable length of time when the patient lives through it. Physical signs as they are called percussion and auscultation will enable us to determine the organ from which the blood proceeds.

^{by} treatment. This must be varied according to the state of the system. The hemorrhage must be stopped as soon as possible. This is the only safe rule for the longer it continues the more dangerous it becomes. If it is caused by the discharge of the blood of an aneurismal tumour the temporary treatment will be of any avail. But such a case might not be seen in a thousand. In a majority of cases as has before been said the hemorrhage is by exhalation now it depends on congestion active or mechanical and the indication of course is to remove that congestion. If tubercles are the primary cause it may be either active or mechanical. They may excite congestion by the irritation they produce or by the mechanical pressure they make upon the blood vessels preventing the free circulation of blood. Sometimes there is considerable febrile excitement the pulse is frequent full and hard the countenance is flushed and the skin hot. In such a case venipuncture and the antiphlogistics are strongly indicated. The patient should be bled ~~according~~

according to the severity of the symptoms and his strength of constitution. He should be placed in a recumbent posture and lightly covered with clothing cool air ~~should~~ admitted into his room perfect rest & quiet enjoyed should not be allowed to talk much. In addition to these things he should be allowed cool acidulous drinks and should a cathartic ^{should be} administered. These remedies are to be continued until the severity of the symptoms is subdued.

The general bleeding in hemorrhoids is not usually called for and when practiced should be used with caution as such patients are often debilitated by previous disease and do not bear large bleeding very well. Local depletion by cupped leeches is of great service in such cases and often very beneficial where general bleeding is also resorted to.

When the inflammatory symptoms are not present or when they have been subdued the astringents and styptics are used as the acetate of lead sulphate of alumina and potassa nitrate of potassa bitartrate of sodium or common salt. Some of the emetics are used in nauseating doses and may be given with advantage sometimes at the commencement of the hemorrhage in full emetic doses. Opium is of great use very good for this given either in nauseating dose or as an emetic at the beginning. Dr. J. S. J. thinks Tartarized antimony is one of the



best remedies for controlling pulmonary hemorrhage. The gives it in small doses and keeps the system under the influence of it for some time.

When the acetate of lead is used it is usually combined with opium. There is a prejudice against this article on account of its sometimes causing lead colic.

It is thought that it does this by being converted into a carbonate of lead in the stomach and Dr. H. H. Thompson who first suggested this idea thinks it may be prevented by the administration of the article with a portion of free acetic acid.

If the hemorrhage is caused by disease of the heart it may be proper to let blood and use the common remedies for reducing the action of this organ but in such cases our most commanding remedy at least one of them is digitalis. This prepares great power over the action of the heart and arteries and is often useful in hemorrhage that does not depend on cardiac disease.

I have omitted a large class of remedies used for controlling pulmonary as well as the forms of hemorrhage viz. vegetable as krusants. Of these are catechu kino Krameria hamamelis the yellow root geranium maculatum geranium rivale statice rosarina the tannic acid &c. Some of these may frequently ^{be} used with advantage. But with

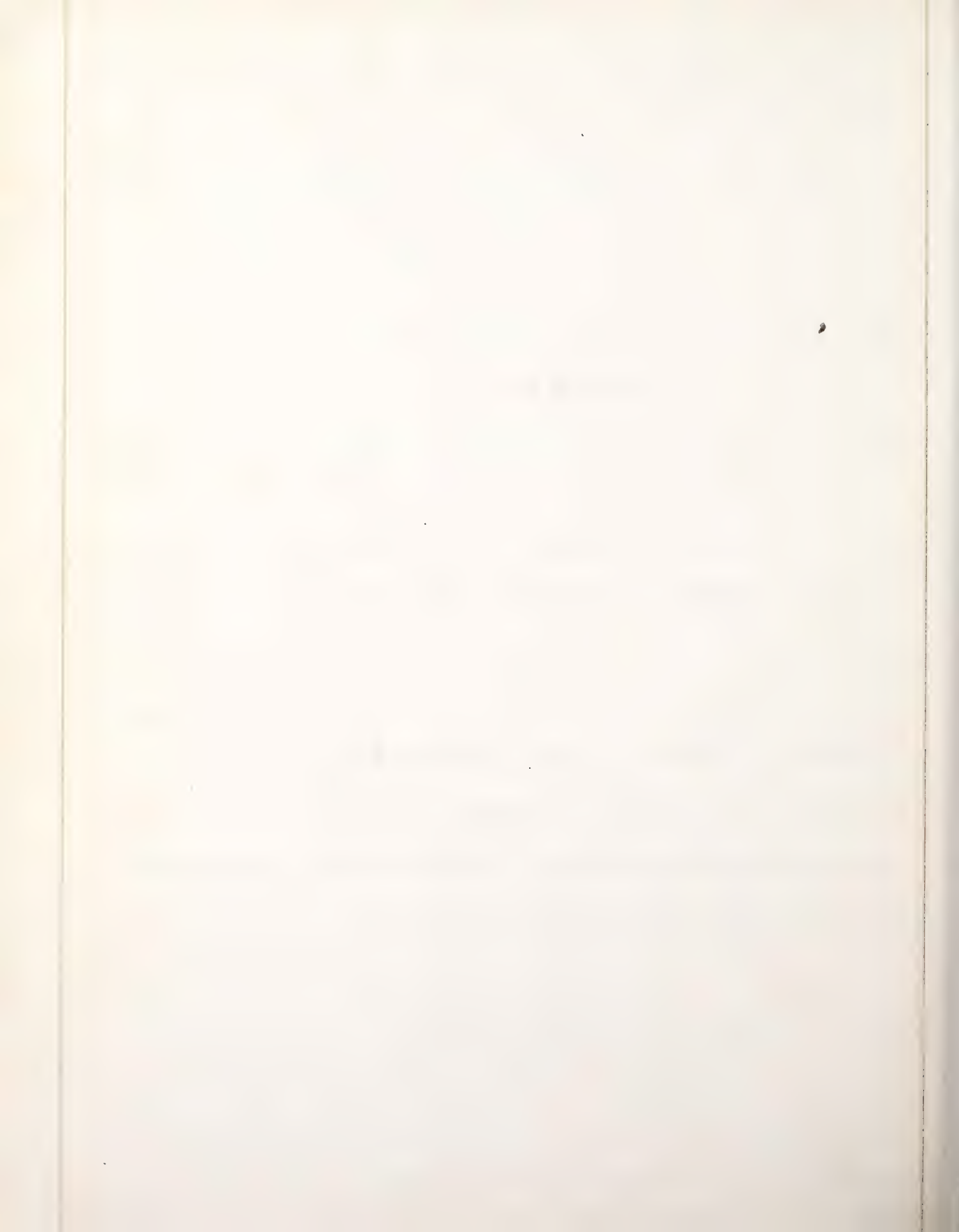
all our long array of remedies instances may occur where in spite of the most judicious application the hemorrhage will only cease with the life of the patient.

William Henry Williams

~~XXIV.~~

Dissertation
on
Intermittent Fever.

By
Albert Brownell Worthington
of Colchester,
Candidate for the Degree of Doctor in Medicine.



I propose making a general review of
Intermittent fever, not attempting to write a treat-
ise on that disease but speak briefly on some points
connected with it. In compliance with a law of
this institution I must write on some subject con-
nected with medical science and I think it will
to write on a disease with which I have had some
acquaintance although my observations will lead me
to differ from authors in a slight degree in several
particulars.

Aque or Intermittent fever may be
defined that form or state of fever which consists
of distinct paroxysms recurring at ^{stated} intervals with a
marked intermission or state of apyrexia which is
perfectly free from fever.

The paroxysm may be divided into three
stages 1st the cold stage 2^d the hot stage & 3^d
the sweating stage.

Symptoms. The cold stage is preceded

by more or less general indisposition languor debility
the pain in the back and joints uneasy sensations
in the extremities and parings. The countenance
during these phenomena is pale and is marked
of a bluish cast this is followed by a sense of
cold all over the body at first confined to the hands
and feet or a sensation like a stream of cold
water trickling down the back. The skin now
becomes pale and contracted preventing the appearance
under which color was in or given skin the pain
becomes more severe the cold increases until the
man now cut as he was appeared robust and
healthy is now shivering with cold in the heat
of summer and is forced to cry as did Caesar
"Give me some drink Titinius like a sick girl".
The voice is feeble & husky the respiration is
rapid the pulse small the urine pale and scanty
and sometimes mixed and milky color.

After the cold stage has continued for a period
of ^{from} twenty minutes to the other
hour or more until the reaction and cold abate
the symptoms of the if the hot stage appear

The hot stage. The skin relaxes and becomes flushed, the heat commences at the epigastrium, whence it spreads to the head and extremities; the thirst increases, the pulse becomes more full and frequent, the respiration is hurried but still hurried, the mouth dry and clammy, the breath hot, the urine still scanty becomes high colored.

The sensation of heat varies; in some cases it is slight, in others almost intolerable. The gastric disturbance commonly ceases in this stage, but there is severe pain of the head and sometimes even delirium. This stage also varies in duration and is followed by the third or,

Sweating stage. This stage is marked by a subsidence of the severe symptoms of fever. The skin gradually becomes soft and the sweating comes on first appearing on the forehead and extending over the face neck &c until it becomes universal. The same relaxation takes place in the internal secretory organs the thirst diminishes the urine is copious and throws down a latitious sediment. The sweating is sometimes profuse diminishing the

bed and body linen at others merely a slight moisture is perceptible. The pain and all uneasy sensations disappear, the breath becomes natural and the pulse full & free, and after a little repose "Richard's himself again".

These three stages constitute a paroxysm or fit and after the sweating stage there is an entire intermission or state of *apexia*; and as we have found that each of these stages vary in duration so also does the period of *apexia* vary and the length of this period constitutes the type.

The most common types are the quotidian having a paroxysm once in twenty four hours, the tertian having a paroxysm once in forty eight hours and the quartan once in seventy two hours; and here the student is perplexed if he attempts to follow up authors generally on this subject for he will find the types mentioned are almost innumerable; he is told that it is important to determine from the beginning what the type will be and then find that fever might be occupied in naming and classifying these varieties per se &c.

Ellison very appropriately remarks authors may be quoted
for anything. This disease varies its form but to at-
tempt ^{to class} all the irregularities appears to me super-
fluous. The patient may have a paroxysm once
in four or five days or he may have two each
day or or one the first day and two the second
they may also appear at different hours in the day
together with many other varieties too numerous to
mention. I had in my own case not less
than ten or twelve different types if all these
varieties are to be called types. Any irregularities
in diet or over exertion and especially exposure
to the heat of the sun would bring on a parox-
ysm after the disease had been held in check
for some time and would not I think have ap-
peared again if a proper regimen had been fol-
lowed but this could be for want of space and space

That a paroxysm commonly returns at stated
periods is not denied but that these periods are
often irregular is as equally true. We have a case
quoted of an intermittent occurring in one paroxysm
the preceding paroxysm. Are we to believe that

the disease has been, waiting just three hundred and sixty five days before it could make its appearance or produce its effect on the system and therefore say there is a type which may be called annual? It is true that persons who have had the ague may and often do have a paroxysm the next summer but that this is governed altogether by a certain number of revolutions of the earth on its axis is hard to believe. But that it depends on some exciting cause acting with the predisposing cause (for the previous exposure to the cause of ague or the effect of such exposure is now the predisposing cause) and that exciting causes may take effect as well one time as another.

The quotidian has the shortest cold stage in proportion to the length of the paroxysm and the quartan the longest. This is a general rule but like other general rules it has exceptions. Either of the stages may be wanting. I was attacked with a quotidian with no cold stage until the third paroxysm, and my brother was attacked with the same type having no hot stage.

12
The duration of the paroxysm varies from two to sixteen or eighteen hours. The hour of the day at which it appears also varies. The quotidian commonly comes on in the morning the tertian about noon and the quartan in the afternoon. It seldom occurs at night but this is sometimes the case.

"Of the Causes, and first the Predisposing. The causes usually ranked as predisposing are probably little concerned in producing the disease. A previous attack undoubtedly predisposes to another attack until the patient has become habituated to the soil and climate or as the vulgar say has worn out the disease. Those who have never been exposed to the exciting cause of ague will be more liable to be affected by such exposure than one who has always lived in an aguish district. Authors mention bad health as a predisposing cause but I have not seen it prove so. I have seen the most robust and healthy taken down with this before the feeble and sickly probably however from being more exposed to the exciting cause. Dr. Gregory mentions

weakness of body, whether owing to a poor un-
wholesome diet long watching fatigue severe
evacuations or previous disease is augmenting the
predisposition to ague. And hence (he remarks)
it is that it prevails with so much greater frequen-
cy and virulence in camps than in other situations
particularly after a severe campaign when the men
have been hard worked and exposed to great
privations. I think this may be accounted for from
their being so much exposed to the exciting cause.

Exciting cause. The great cause that which
has appeared to me almost indispensable to the
production of ague has been called Marsh Mi-
asm or Malaria. ^{the word} Whether Malaria is the best
term that could be chosen to express the cause of
ague is not for me to say. It has undoubtedly been
used to express more than the literal meaning for
air may be bad or impure in certain localities
and still not be malarious in the common ac-
ception of the term. As I have understood
the term when applied to the cause of ague
it means a state of the atmosphere produced

by exhalations from vegetable matter in the
process of decomposition or from the soil but
principally the former. The term marsh miasm
is objectionable inasmuch as aque may be pro-
duced without the existence of any marsh at
all.

The reasons for ascribing aque to this
malaria are 1st the disease prevails to a
greater extent where there is much vegetable
undergoing decomposition as for instance near
marshes and in new countries that are being
cleared 2^d it declines as the marshes have been
drained or the forests have been cleared for
some time 3^d it seldom or never appears in
one who has not been exposed to these exhalations.

That heat and moisture of themselves are not
sufficient to produce the disease is proved from
the fact that it does not prevail in such climates
without some other cause. It has been thought
by some to depend chiefly on alternations of tem-
perature. Does the climate ^{change} as civilization moves
westward? are there alternations of temperature

driven before civilized man like the beaver?
Or does uniformity of temperature prevail
like the crow? What has produced such a change
in the health of western New York within twenty
or thirty years? Is it that the temperature
has become more equable, or that there is less
variable matter now in a slab of decay?

There are some things to be learned from a back-
woodsman and if you ask him he will tell
you that ague is not known in the dry parts
of the west until the process of clearing is car-
ried to some extent. I ^{could} mention many circum-
stances which, in my opinion, ^{as} prove
that alternation of temperature is not the
chief cause of intermittents but time will
not permit, I will mention one.

I spent a summer near one of the head
branches of the St. Josephs river in Michigan.
In the immediate neighborhood intermittents
prevailed to a great extent not a family &
hardly an individual escaped that season
and the season preceeding; but in a district

where I was acquainted within ten miles of the first named place some of the first settlers assured me that they had never seen a case of ague nor had there ever been a case in that settlement. I think there could be little difference of climate in the two localities as far as temperature was concerned, but there was this difference, in the malarious district (if I may use the term) there were marshes which were overflowed a part of the year and became partially dry in the summer, besides - this was timbered land and when the forests were removed there was a vast quantity of matter exposed to the heat of the sun, whereas the healthy district was what is called "oak opening" having but few large trees and comparatively little vegetable matter on the ground.

Of the proximate cause I know nothing.

Diagnosis. There is little difficulty in the diagnosis of this. It differs from hectic in its cause the regularity of its paroxysms a paroxysm of hectic fever is brought on at

any time by slight exciting causes and after the sweating stage the patient is weaker than before but in cases after sweating the patient is comparatively well. ~

Prognosis. If the ^{disease} is not complicated, and is treated early a speedy cure may be promised. If ^{not} properly treated it may continue for a long time causing great debility and a susceptibility to other diseases. One of its most common effects is enlargement of the spleen. Enlargement of the liver and jaundice are not uncommon after ague. ~ Many other complications may be apprehended from the long continuance of the disease such as ascites anasarca affections of the chest &c. In tropical climates it is said to be a much more serious disease but in the aguish districts of the western states it is often said we are all well except that we have the ague or it is nothing but the ague. I have never known a case of simple intermittent prove fatal. ~

Treatment. The treatment now under
resolves itself into that to be pursued during
the paroxysm, and that of the intermission.

Treatment during the paroxysm. First the
cold stage. And here I shall beg leave to
differ from most authors I have read on this
subject, in regard to giving warm drinks.
It is said that patients prefer warm drinks
in this stage. This I believe to be a mistake
at least I have found the contrary to be true
as far as I have had an opportunity of observing.
The cold stage was formerly thought to be a
state of debility, and to require stimulants, but
many recent authors prefer depletion, at least
to stimulation, and Dr. Macintosh recom-
mends venesection. I think I have seen
the best effects from cool drinks in the cold
stage, and decidedly cold drinks in the hot.
External warmth I would certainly recommend
but not to the extent that Dr. Eliotson would
carry it. The patient should be placed in bed
with plenty of clothing, and I have found many

blankets better than down comforters as the weight of the bed clothes is very agreeable; a warm brick or a bottle of hot water may be applied to the hands, one to the feet, but I consider it little use to attempt to shorten this stage by heat however applied for if it is accomplished I do not believe the whole paroxysm is shortened.

In the hot stage the patient, ^{should} have cold drink, cold spring or ice water, watching however, the appearance of perspiration on the forehead and tepid drinks as soon as any moisture is perceived.

During the sweating stage little is required, the patient should be cooled gradually but the perspiration should be suspended, and then left ^{to} resume.

Treatment during the intermission, the object now is to make such an impression on the system as to prevent the recurrence of the paroxysm. The ~~best~~ great means of fulfilling this indication is by the administration of Cin-

china or some of its preparations or some preparation of arsenic. Of these medicines the best is the sulphate of quinine. If there is much gastric disturbance as marked by jurred tongue, nausea and want of appetite, the quinine may be preceded by a mild cathartic or gentle emetic.

The best method of administering the quinine is in solution ten grains of the Sulphate of quinine and eight drops of sulphuric acid may be dissolved in eight ounces of distilled water and given in one or two doses within two hours of the expected attack. Some practitioners however prefer giving it in small and repeated doses say two grains once in two hours during the intermission.

If the stomach will not bear the medicine it may be given in the form of enema; from six to eight grains being suspended in thin starch and thrown up the rectum a short time before the period of attack, or it may be applied intermically from nose to rectum.

sprinkled on a moistened surface or applied
in the form of an ointment.

Various remedies have ^{been} employed at
different times for the cure of this disease
among which may be mentioned that of
making an incision in the skin through
the medium of the mind. In this way the
amulets and abracabras of the ancients
operated ~~to~~ to prevent a paroxysm. The sud-
den and unexpected intelligence has been
known to prevent a paroxysm even after
the paroxysmal symptoms had appeared.

Monks have been used to produce a
permanent state of excitement and thus
prevent the recurrence of the paroxysm.—
Any of the vegetable or mineral tonics may be
used. Cinchona is sometimes given the sub-
stance in the dose of half a dram or a dram.
Lime juice is an agreeable vehicle for the
bark. But when the quinine can be
procured it is the best remedy we can
have.

Dr. Hirsch speaks favorably of the
uses of alcoholic drinks just as the cold
stage is coming on, but I should ob-
ject to this, as I have known it to pro-
duce serious effects viz. raving madness the
patient threatening and even attempting
to destroy the lives of his family.

Wm. H. Williams



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